

February 1958 - Through January 1959

RESEARCH GRANTS:

B { [REDACTED] \$36,800.00 ✓
[REDACTED] Patient Hospitalization 1,000.00 \$37,800.00
[REDACTED] 2,950.00
[REDACTED] 3,466.66 344,216.6

SALARIES & FEES AND SOCIAL SECURITY:

Salaries and Fees 15,478.90
Social Security 307.23 15,786.1

SUPPLIES AND SERVICES:

Special Chemicals:

B { [REDACTED] \$ 650.00
[REDACTED] 217.80
[REDACTED] 1,355.68
[REDACTED] 2,037.52 4,261.00
B { [REDACTED] 918.30
[REDACTED] 27.98 946.28 5,207.8

TOTAL EXPENDITURES

\$ 65,210.3

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1 5 7 8 6 1 3
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45-1

February 1958 - Through January 1959

RESEARCH GRANTS:

B { [REDACTED] \$36,800.00
[REDACTED] Patient Hospitalization 1,000.00 \$37,800.00
[REDACTED] 2,950.00
[REDACTED] 3,466.66 \$44,216.66

SALARIES & FEES AND SOCIAL SECURITY:

Salaries and Fees 15,478.90
Social Security 307.23 15,786.13

SUPPLIES AND SERVICES:

Special Chemicals:

B { [REDACTED] \$ 650.00
[REDACTED] 217.80
[REDACTED] 1,355.68
[REDACTED] 2,037.52 4,261.00
[REDACTED] 918.30
[REDACTED] 27.98 546.28 5,207.28

TOTAL EXPENDITURES

\$ 65,210.00

B

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1 3 9 .00 C
1 5 2 .00 C
1 6 8 4 9 2
2 0 3 7 .00 C
00 C
00 C

B

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4 2 6 1 .00
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FOR DETOS

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1566

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68

28 Dollars

E

B

B

special chemical

C

46-1

FOR DEPOSIT ONLY

B

E

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07520
07520



B

E

✓

March 11 1958 No 1426

Pay to the order of

7

hundred & thirty-two

\$532.00

Five Dollars

B

C

E

10-11-58



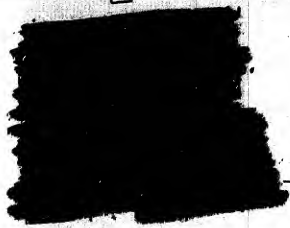
45-1

SECRET

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OF
FOR REPORT TO A

E



B



SECRET



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2-12-58 JAP

1531

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2nd 92/72

E

B **E** *January 1954* No. 1591 **E**

Pay to the order of **B** **E** *\$139¹⁰* **E**

United States thirty-nine **E** **B** *10 Dollars*

Spec. Chemical **C** **E**

STAMPED SIGNATURE

PAY TO THE ORDER OF

B**E****E**

B **E** February 28, 1958 No. 1419

B **E**

Pay to the order of **B** \$ 52.91

Fifty-two **B** 76 Dollars

Invoices 992059, 990756

Special Chemicals

AUTHORIZED SIGNATURE

PAY TO THE ORDER OF **B**

E

PAY TO THE ORDER OF

B

E

E

B

E

MasterCard No

1467

E

Pay to the order of

\$1684⁹⁶

One thousand six hundred and eighty-four

96 Dollars

Special Chemicals

B

C

AUTHORIZED SIGNATURE

B **E**

May 13 1958 No. 1455

E

650.00

B **E**

The following order is

hundred & fifty

Special Chemicals

B **E** **C**

E

\$5 Dollars

AUTHORIZED SIGNATURE

B **E**

E

E

February 28 1958 No. [redacted] E
[redacted] F [redacted] E
[redacted] C
Pay to the order of [redacted] \$ 233.71
Two hundred thirty three and 71/100 Dollars
Supplier [redacted] C [redacted] B

C [redacted] E [redacted]
[redacted] E
[redacted]
[redacted]

FOR DEPOSIT ONLY
TO ACCOUNT OF

100 00
100 00

E

E

B

Pay to the order of

July 23 1981 No. E
E E
C. \$ 228.99
Twenty-eight
Supplies

UNITED STATES

46/2

B

October 9 1958 No

E

E E

\$201.46

466 Dollars

deduction

Supplies

B

FOR DEPOSIT ONLY
TO ACCOUNT OF

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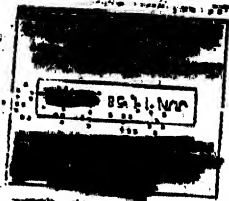
E

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OCT 24 1958

1958 No. [redacted] E
[redacted] E
[redacted] E
Pay to the order of [redacted]
Twenty [redacted] 27 78
Supplies [redacted] 78
150 Dollars
B C

FOR DEPOSIT ONLY



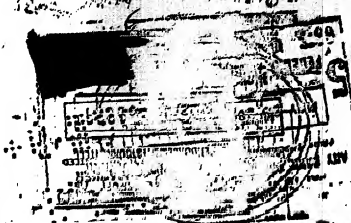
4-3

Research
Fronts

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					9	9	
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1958

FOR DEPOSIT ONLY



Washington, D.C. 20540

1958 No

1466

Pay to the order of

Reinhardt Foundation

\$1,735.00

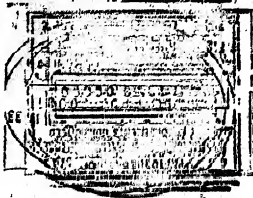
One thousand

Seven hundred and thirty-five and no/100

\$1,735.00

and pay to the order of

EDITH W. SAVORE



Washington, D.C. January 28 1958 1412

Pls. pay to the order of

C. X.

Kenneth Foundation

۴۷۳

seven hundred thirty three

—R.P. F.

Research Assistant
Babcock 11/5

AUTHORIZED SIGNATURE

10-10-68

[Redacted]

Washington, D.C. - February 28, 1958 No 1411

Paid by addressee

Robert L. Leland \$8.00

Eight

N.P.

Rosenfeld

Dollars

AMOUNT PAID TO ORDER

MAY 21 1968

FOR DEPOSIT ONLY

FBI

Chapman

N.P.

Washington, D.C. May 13 1958. No. 1457

Hospital

51000 60

700-01

Pt hospitalized

1126



DAY
TO THE
ORDER OF

B

Medical

C. January 7

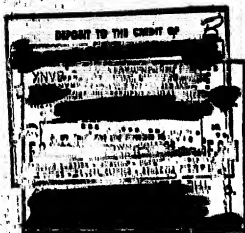
1952

\$4,000.00

Four thousand

00 DOLLARS

For Research Pathology Dept.



70-2
[Redacted]

Page 1

100
100

2
[Redacted]

[Redacted]

[Redacted]

1106

WASHINGTON

August 12 1958

\$ 4,000.00

00
105 DOLLARS

Four thousand

Non Research Grant -

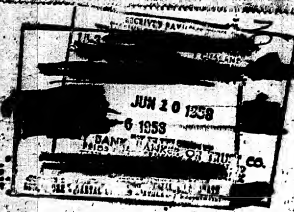
REPORT TO THE GRANT OF

SAVING

105 DOLLARS

105 DOLLARS

C. L. H. H.



C. L. H. H.

C. L. H. H.

Washington D.C. June 8 1958 *12* 1475 *E*

Five thousand *Medical School* *\$5,000.00*

Grant - Pathology Dept.

Five thousand *Medical School* *\$5,000.00*

Grant - Pathology Dept.

4-3

Washington, D.C. December 10 1950 No 1000

Pay to the order of

School

\$1,000.00

thousand

Dollars

Special

AUTHORIZED SIGNATURE

PAID TO THE ORDER OF

RECEIVED

DEC 10 1950

ANY BANK OR TRUST CO.

Receipt No. 7 341

Pay to the order of

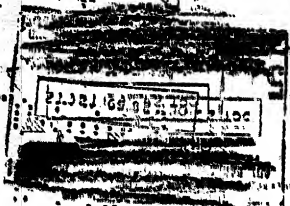
4-3

RECEIVED FEB 27 1958 No 1530

Pay to the order of *University*

Two thousand *and* *no* *hundred* *and* *fifty* *00* *Dollars*
Reginald G. Smith

FOR DEPOSIT ONLY
TO THE CREDIT OF



-E

B

B

December 10 1958 No

For
Lester
Carter

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2600

1958 Dollars

4 hundred

Special Research Agent

B-

45-9

二 E

4-0-22/



B

Copy
to the
order of

Five per

Special Research Project

20

B-

— E

B

December 10 1858



—C

1000

W. D. Ireland

[Illegible handwritten signature]

33

B

B

4-4

Pay
later

C

8/20

Dollars

13

13

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RECEIVED

15-1

E



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66666 85.91 NAR



C

June 1958 NR



- C \$600.00

hundred

\$800.00

D-164 Studies



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(C)

*For
letter
only*

*One [redacted] [redacted]
Consultant*

December 31, 1951

(C)

(C)

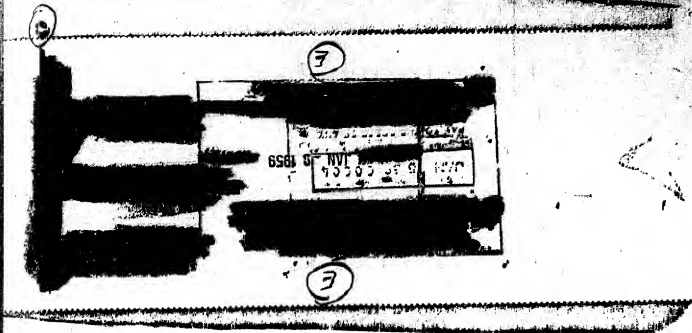
(C)

\$100.00

Dollars

(C) (C)

AUTHORIZED SIGNATURE



December 31, 1958

Pay to the order of [redacted]

Five hundred & no/100

Salary

208.87

4 Dollars

STAMPED SIGNATURE

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(E)

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Line 1234 1058 1/2

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(A)

AUTHORIZED SIGNATURE

45-5

December 22, 1958 No.

(E)

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(E)

\$250.00

(C)

Two hundred and fifty

00 Dollars

25000

(C)

(C)

James Boness

AUTHORIZED SIGNATURE

(E)

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(B)

Pay
to the
order of

One hundred & ...

Xmas Bonus

December 1958 No 8

(C)

\$100.00

for ...

(B)

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(H)

AUTHORIZED SIGNATURE

45-5

⑤

December 22, 1958 No.

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Yours
to the
world.

④

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Leptine

100 Dollars

Xma, Bonito

5-400-14

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66655-254231

12-11-55

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DEC 24 1959

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December 22, 1959 No

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(C)

Page 27

Two hundred and eight

27 Dollars

Xmas, 1959

(B)

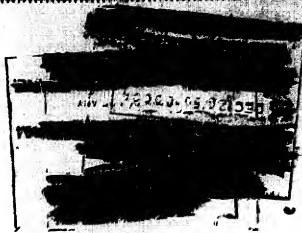
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APPROVED SIGNATURE

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2	0	8	3	✓
	9	7	5	✓
2	0	8	3	✓
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Pay
to the
order of

One hundred and fifty

January 30, 1959 No



\$150³⁰

100 Dollars

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4-6

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January 30 1959. 1/2

Due to be
paid

- C

\$168¹⁰

Received a eighty-eight

100 Dollars

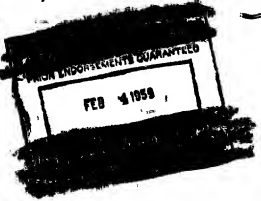
Salary

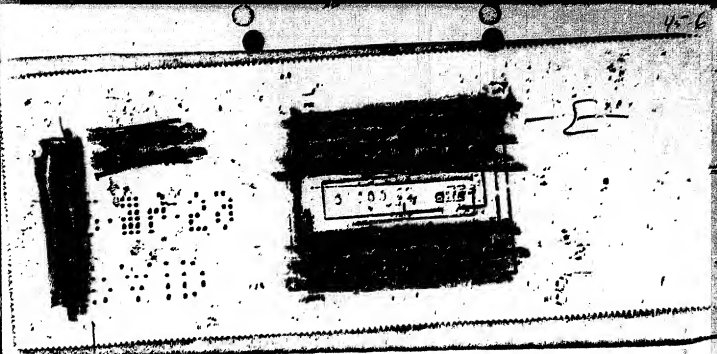
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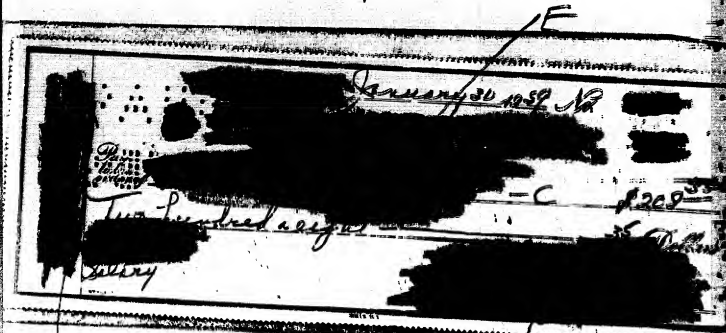
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January 30, 1959 No

97 *50*

100 Dollars

Salary

B *B*

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1000 OF 1000

January 30 1959 No. [REDACTED]

[REDACTED] E 35
C \$ 208

Two hundred & eight

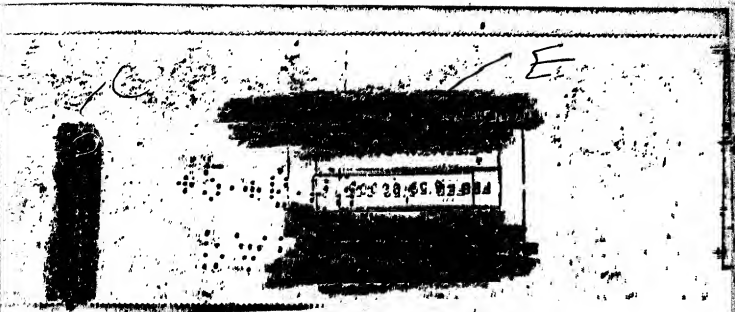
Silvery E [REDACTED]

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TO: MARKUS ROSE No

Pay to the order of

One hundred and twenty — \$120.00

Twenty Dollars

post-dated

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Dollars



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 November 27 1955 No. 



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Salary E 

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4-7

November 29 1958

Pay to the order of [redacted] \$97.75

100 Dollars

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[redacted]

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[REDACTED]

[REDACTED]

DEC 3 1958

[REDACTED]

[REDACTED]

Pay
order of

Five Hundred

Salary

[REDACTED] Dollars

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October 20 1952 NR

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[REDACTED] October 29 1958 No. [REDACTED] E
[REDACTED] E [REDACTED] E
[REDACTED] C Dec 27
[REDACTED] E B [REDACTED] \$7 Dollars
Salary [REDACTED]
[REDACTED] AUTHORIZED SIGNATURE

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45-8

Witnessed by me *Nov*

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16720

Ad. Holland

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Salary

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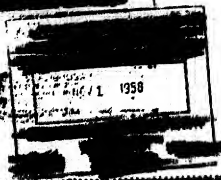
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F.

~~CONFIDENTIAL~~

NOV 8 1951

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Walter J. 1958 No

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8200

97 Dollars

did not

B

Salary

C

RECEIVED

NOV 14 1964

(C. L. K. 1053) No

2019

September 30, 1958

E

\$151.53

53 Dollars

One

and a fifty-cent

Salary

B

C

C

E

100 100

For Deposit

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B

E

\$169

12-10-1944

B

C

Salary

45-8

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45-9

September 30 1934 No.

Paid
to the
order of

Two hundred and eighty

dollars

\$ 208.98

98 Dollars

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Washington, D.C. August 20, 1958 No 1504

Do not
alter
original

Exc. Trustee

Sol. 20

\$143¹⁵

15 Dollars

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 12-11-1959
BY 61000

Washington D.C. Dec 14 1858 No 3

1505

94

Seventy-nine

Donno

Red Dorking

4-10

PAID TO THE ORDER OF
ANY BANK, BANKER OR TRUST CO.
OR TO THE ORDER OF
10196 0000 0000
10196 0000 0000

05020
0000

8 Washington, D.C. August 22 1958 No 1506

Pay to the order of [Redacted] *75*

One hundred and no/100ths *75* *Dollars*

75

AUTHORIZED SIGNATURE

for leg...

WASHINGTON, VIRGINIA

SEP 25 1958

WASHINGTON, VIRGINIA

Washington, D.C. 20540

1507

Handwritten: 251, 270, 270

Washington, D.C. *August 24, 1958* No. 1509

(D) [REDACTED] *to the order of* [REDACTED] *N.W.*

One hundred and eighty-nine *plus* *two* *Dollars*

Twenty [REDACTED]

See Report

[REDACTED]

[REDACTED]

AM 10-10-58

[REDACTED]

1510

U.S. N. W.

100.00

20 Dollars

Consultant

RECEIVED

SEP 6 1958

SEP 6 1958

SEP 6 1958

AMERICAN BROTHERHOOD OF HORSE CO.
PRIOR ENDORSING OFFICIALS

SEP 9 1956

NO 10

B

July 31 1958 No. E

Flag to the Secretary C

hundred and eighty E

188 Dollars

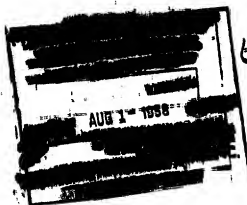
Secretary B

C

RECEIVED SIGNATURE

U

95	1	5	0	0	5
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9	1	5	0	0	5
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9	1	5	0	0	5



July 31 1958 No

E E

143¹⁵

hundred forty-three

100 Dollars

B
E C

c

E

1958

JUL 31 1958

E

July 31 1958 No. [redacted] E
 [redacted] E
 Pass to the [redacted] C 169 12
 [redacted]
 One hundred sixty-nine [redacted] 12 Dollars
 Salary [redacted] B [redacted]
 [redacted] C [redacted]

[redacted] E
 [redacted] E
 [redacted] 1958
 [redacted]

E

E

AUG - 1 1958
AUG 4 08 00 12

B

July 31 1958 No *E*

C \$97 ⁷⁵ *E*

75 Dollars

Salary

July 31 1956 No

E

Pay
to the order of

C

100

One Hundred

Dollars

Consultant

B

C

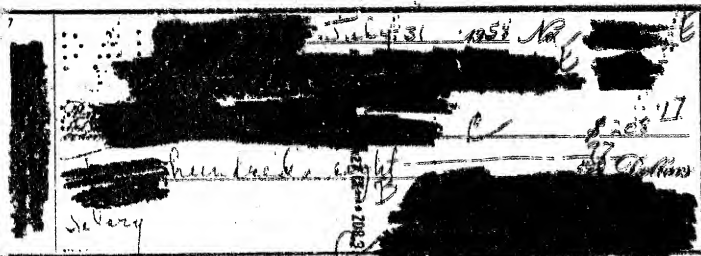
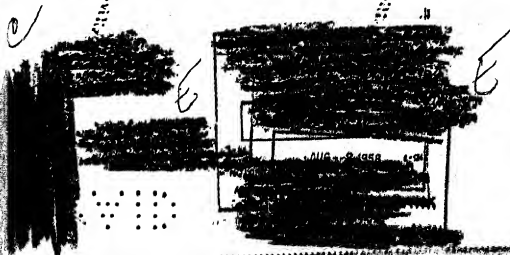
EN

[Redacted]

C

[Redacted]

45-11



B

1955 No.

E

E

Pay
to the order of

C

\$169¹⁰

One hundred and sixty-nine

and 10/100 Dollars

E

B

Salary

C

AUTHORIZED SIGNATURE

H

C

E

JUN 1955

E

✓
1 1 5 7 5 3 0
9 2 8 7 9 0
6 4 0 0 0
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45-12

B

June 30 1958 No. [redacted] E

[redacted] E

[redacted] C

[redacted] 15

[redacted] 15 Dollars

[redacted] B

[redacted] C

E

[redacted]

[redacted]

[redacted] 8561 6 e 718 100-00

[redacted]

[redacted]

B

June 30 1958 No. [redacted] E E

Pay to the order of [redacted] C \$208.17

Individual eight 100 Dollars

Salary B [redacted]

C E

9951 2 JUL 3 1966

31 2 5 100

C

E

E

for deposit

100 00

US 27 700

B

June 20 1955

E

E

Pay to the order of

\$268 78

Twenty six and 78/100

26 Dollars

Salary E

B

45-10

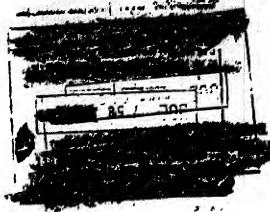
C

E

E

0020

0000



B

Pay to the order of

hundred

Consultant

JUNE 30

1955

E

\$100.00

Dr. D. H. H. H.

B

For Raymond



Washington, D.C. May 29, 1958 No 1469

(D) [Redacted]

Are hereby [Redacted]
Salary

\$ 189¹⁰

188 Dollars

[Redacted]

RECEIVED SIGNATURE



Washington, D.C. May 29, 1947 1470

Pay to the order of [REDACTED] \$ 208.98

Two hundred and eight and 98/100 Dollars

Salary

15-13

FI FOR DEPOSIT ONLY

JUN 2 - 1968

[REDACTED]	
JUN 2 1968	JUN
[REDACTED]	

Washington, D.C. 20540 1058 No 1471

Pay to the order of

Ninety-seven

Salary

\$ 97.75

100 Dollars

Deposited

WM: 235805.3

2 / Washington, D.C. May 2, 1958 No. 1472

10
100
1000
10000

1854

208¹⁷

Two hundred eight.

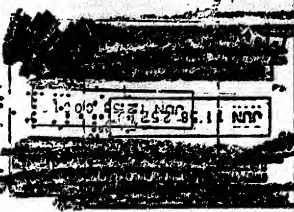
Salary

27 Dec 1941

AUTHORIZED SIGNATURE

45-13

1-11-73



Washington, D.C. May 29 1973 NR 1473

Per
Letter
indirect

One hundred

\$100.00

Consultant

100 Dollars



(B) [Redacted] April 30 1957 No. [Redacted] (E)

Pay to the order of [Redacted] (C) \$169¹⁰

One hundred and eighty nine 10/100 Dollars

Salary (B) (C) [Redacted]

AUTHORIZED SIGNATURE

169100
143750
209750
208580
100000
927950

(C) [Redacted] (E)

On Deposit [Redacted]

100000

(D)

April 30 1958 No.

(E)

(C)

\$143¹⁵

One hundred & forty three

15 Dollars

Salary

(B)

(C)

(D)

(E)

FOR DEPOSIT ONLY

MAY 2 5 1958	
MAY 1 1958	

April 30 1958 No.

*Pauline
L. L. L.*

⑤

①

208 91

Two ~~four~~ eight

97 Dollars

Salary

②

THIRD SIGNATURE UNIT

④

③

MAV 55-1230 MAY 8

(C)

(E)

(E)

1-0000 85.9 471

(B)

April 1958 No.

(E)

97 15

25

Twenty-one

Palmy

(C)

(C)

INDEXED SERIALIZED

45-14

(B)

001122

Pay
to the
order of

Two hundred and

Salary

Amount \$30.00

(C)

\$208.98

98 Dollars

(B)
(C)

SIGNATURE

(E)

(C) (C)

(E)

MAY 6 1950

(C)

(E)

(E)

US-21 AM
14

(B)

(E)

May 5

1952

(C)

(E)

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20	9
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93	0
94	0
95	0
96	0
97	0
98	0
99	0
100	0

Pay
to the
order of

John Carey

45-15

C

[REDACTED]

E

[REDACTED]

B

Pay
to the
order of

One
Salary

March 31 1958

\$ 100.00

100 Dollars

[REDACTED]

March 31 1958 No. [REDACTED] E
[REDACTED] E
[REDACTED] 98
[REDACTED] \$208
[REDACTED] 98 Dollars
[REDACTED] B
[REDACTED] C
Salary

E
[REDACTED]

[Redacted] No. *[Redacted]*

[Redacted] E

[Redacted] E

Pay to the order of _____ C \$169¹⁰

[Redacted] 10 Dollars

[Redacted] b

[Redacted] c

[Redacted] AUTHORIZED SIGNATURE

B

March 31 - 1958 No. [redacted] E

Pay to the order of

\$97⁷⁵

Ninety-

00 Dollars

Salary

C

E



45-15

March 31 1958 No. [REDACTED] E

[REDACTED] E

Pay to the order of [REDACTED] C

\$ 143¹⁵

One hundred & forty three ¹⁵/₁₀₀ Dollars

Salary B [REDACTED] C

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

45-16

3

Washington, D.C. February 28 1958 No 1405

Pay
to the
order of

\$ 143 15

One hundred and forty-three

15 Dollars

Salary



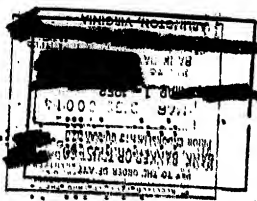
AUTHORIZED SIGNATURE

U U W I U

0005500003
0005500003
57710780003
14999900003
16880000003
12221000003
9279

2-2

[Redacted vertical text block]



Washington, D.C. February 28 1958 No 1406

[Redacted] E

[Redacted] C

[Redacted] \$97.75

[Redacted] 75 Dollars

[Redacted] E

[Redacted] C

[Redacted] AUTHORIZED SIGNATURE

[Redacted] C

RECEIVED PAYMENT FROM THE
WASHINGTON NATIONAL HOUSE

[Redacted] E

MAR 4 1958

THE BANK OF AMERICA TRUST CO.
WASHINGTON, D.C.

Washington, D.C. February 28, 1958 No. 1407

Pay to the order of

One hundred and sixty-nine *169¹⁰* *100 Dollars*

[Signature] AUTHORIZED SIGNATURE

see stamp

PAY TO THE ORDER OF ANY
BANKER OR TRUST
COMPANIES GUARANTEE

AMOUNT OF PAYMENT IN FULL
AND COMPLETE PAYMENT IN FULL

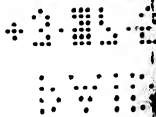
100 DOLLARS

OF THE
 IN THE
 SANITARY
 PAY TO THE ORDER OF ANY
 JAN 1 - 1958
 1958
 1958

127

Airman's Signature

for deposit



ANY BANK, BANKER OR
22222 95.2
MAR 0 1958

Washington, D.C. February 28, 1958 No 1409

Pay to the order of

[REDACTED]

N.W.

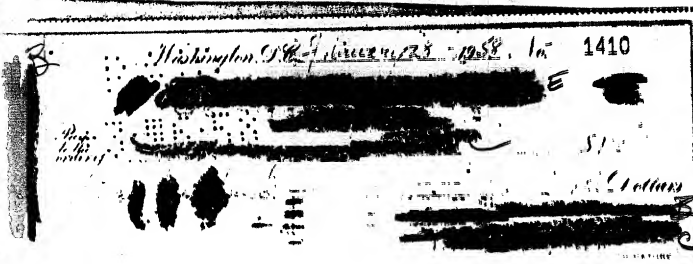
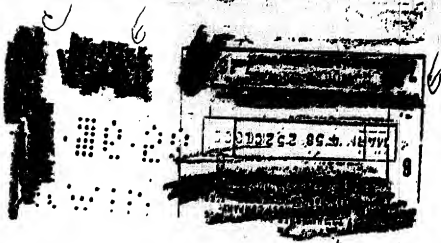
\$258.48

Eighty-

78 Dollars

John L. ...

[REDACTED]
AUTHORIZED SIGNATURE



				.00	C
				.00	C
				.00	C
				.59	C
1	7	4	1	.11	✓
1	7	4	1	.11	✓
1	7	4	1	.11	✓
1	7	4	1	.11	✓
1	7	4	1	.11	✓
1	7	4	1	.11	✓
1	7	4	1	.11	✓
2	5	5	3	.38	✓
1	7	5	3	.75	✓
				.63	✓
1	7	5	3	.94	✓
1	7	5	3	.94	✓
2	1	7	4	.60	✓
				.00	✓
				.00	✓
2	1	7	4	.34	✓

45-17

٤

174

174

14 Dollars

5

[REDACTED]

07200
4410

MAY 24 1956

Wm. Singleton Wm. H. 1258 No 1440

EW

10
\$174

10 Dollars

- 0000

Quoniam. Lge. Lca. Topo.

[REDACTED]

PAY TO THE ORDER OF



75029 0211 W02

Chilodactylus

Washington, D.C. June 1958 No 1477

[illegible]

45-11

E E

B

\$174¹²

(B) [REDACTED] dda 000000 - four

Dollars

[illegible]

0110 001 001

44-371056

E

45-17

Washington, D.C. August 8 1958 No 1498

[Redacted] E *[Redacted]* E
[Redacted] E *[Redacted]* E
\$174.10
seventy-four ——— 10 Dollars
AUG 12 1958
W. J. [Redacted]
[Redacted]

AUG 13 50 63065

TO THE ORDER OF

[REDACTED]

E

[REDACTED]

1255 65065

RECEIVED BANCHESTER

[REDACTED]

Chadwick

Washington, D.C. September 10, 1958 No 1514

[REDACTED]

E

[REDACTED]

[REDACTED]

E

25-82

is enclosed in fifty-five

SEP 20
W. H. Tolson

[REDACTED]

b

C

E

E

136618 100

80-65-5

E

11 00 11

11 00 11

1402497 Washington, D.C. October 22 1952 1/2 1528

Pay to the order of

Recd

Washington Top

C

1375

25 Dollars

AUTHORIZED SIGNATURE

B

45-17

E

775

09.11.1958

E

This check is the obligation to pay and must be paid to the order of the payee.

Washington, D.C. November 4, 1958 No 1540

NOV 11 1958

One hundred and seventy five 98

W. H. Tates, Act E

98 Dollars

5

25

•

916026502 NAC

THE UNIVERSITY OF CHICAGO PRESS

45-19

REPORT OF EXPENDITURES

February 1, 1957 - January 31, 1958

Research Grants:

B B		\$50,150.00	
		<u>1,605.00</u>	\$51,755.00
B			12,381.31
B			<u>4,791.95</u>
			\$ 68,726.26
		and Social Security	
			16,917.65

Travel and Meetings:

CCCCC		\$183.87	
		282.36	
		249.53	
		264.00	
		360.17	
		<u>739.93</u>	1,869.28

Special Chemicals:

CCCCC		6,280.00	
		2,526.21	
		270.80	
		517.40	
		<u>300.00</u>	9,894.41

Supplies:

DDDD		1,633.83	
		231.00	
		522.02	
		131.76	
		<u>87.06</u>	<u>2,601.67</u>

Total

\$ 100,013.27

Washington, D.C. [redacted] E E

B 1273.20

Two hundred and seventy

Special Agents

[redacted] B

Washington, D.C. [redacted] 1931

(B) [redacted] E E

B 1000

Three hundred

Special Agents

[redacted] B

B

[redacted] E E

B

[redacted]

[redacted] B

B

Washington, D.C. 20540
[REDACTED] 1000

[REDACTED] E E

[REDACTED] B

B [REDACTED] C

Washington, D.C. 20540
[REDACTED] 1200

[REDACTED] E E

[REDACTED] B

[REDACTED] B C

B

[REDACTED]

[REDACTED]

E **[REDACTED]** E

[REDACTED]

B

[REDACTED]

B

B

[REDACTED]

B

2	4	0	0	0	0
2	5	0	0	0	0
1	3	8	0	0	0
				0	0
				0	0
				0	0
6	2	8	0	0	0

1800

(D)

B

1800

C

On the basis of the results
special chemicals

B

Washington, D.C. March 1 1957. 10 1200

(D)

B

On the basis of the results of the investigation, it is

There is no
evidence
of any

B

B

C

1 5 2 3 8 7
1 4 5 0 0 1
8 5 0 0 0 4
2 5 2 6 2 1
#

[REDACTED] B

[REDACTED]

[REDACTED] E E

[REDACTED] B

[REDACTED] B C

B

[REDACTED]

[REDACTED] E

[REDACTED] B

[REDACTED] C

B

Washington, D.C.

1947. 1. 1203

[REDACTED]

E E

[REDACTED]

B

500

For information only

1947. 1. 1203

[REDACTED]

B

[REDACTED]

L

B

Washington, D.C. January 19, 1945

[REDACTED] E E E

[REDACTED] C

[REDACTED] B

[REDACTED] C

Washington, D.C. January 19, 1945

(D) [REDACTED] E E E

[REDACTED] C

B [REDACTED] B

||

Washington, D.C. 20535 1005

(D) [REDACTED] E E

[REDACTED]

C

[REDACTED] B C

B

||

Washington, D.C. 20535 1005

(B) [REDACTED] E

[REDACTED]

C

[REDACTED] B C

B

11

[REDACTED]

E E

C

[REDACTED]

B

C

B

11

[REDACTED]

E E E

C

[REDACTED]

B

B

C

Washington, D.C. 20540

[REDACTED] E E
[REDACTED] E

[REDACTED] B
[REDACTED] C

Washington, D.C. 20540

(C) [REDACTED] E E
[REDACTED] C

[REDACTED] B
[REDACTED] C

15-21

Washington, D.C. November 14, 1957. to 1371

[REDACTED] E E

[REDACTED] C 10/12

[REDACTED] 10/12

[REDACTED] B

Washington, D.C. November 14, 1957. to 1370

[REDACTED] E E

[REDACTED] C 10/12

[REDACTED] B

Washington, D.C. 20540 2/15/67 1967

[REDACTED]

[REDACTED] E E
[REDACTED] C

[REDACTED] B

[REDACTED]

B

Washington, D.C. 20540 2/15/67 1967

[REDACTED]

[REDACTED] E E
[REDACTED] C

[REDACTED] B

[REDACTED] C

B

4/5-21

~~SECRET~~

~~_____~~ c

[Faint handwritten notes and signatures]

Handwritten: *Handwritten text, possibly a signature or date, followed by the number 364.*

[REDACTED] **SECRET**
 [REDACTED]
 [REDACTED] **C**

11-2-2011

[REDACTED]

45-41

Washington, D.C. December 21, 1962

[REDACTED] E E
[REDACTED] C
[REDACTED]

Dear Mr. [REDACTED]
[REDACTED] B
[REDACTED] C

Washington, D.C. December 21, 1962

(D) [REDACTED] E E
[REDACTED] C
[REDACTED]

Very truly yours,
[REDACTED] B
[REDACTED]

[REDACTED] EEE

C

[REDACTED] B

[REDACTED] EEE

C

[REDACTED] B

[REDACTED]

[REDACTED]

E E E

C

[REDACTED]

B

C

[REDACTED]

[REDACTED]

E E E

C

[REDACTED]

Vertical scribbles and a handwritten 'B' at the bottom left of the top page.

Large horizontal blacked-out redacted area with handwritten 'E E E' to the right and a 'C' below it. A second horizontal redacted area is located below the first one.

Vertical scribbles and a handwritten 'B' at the bottom left of the bottom page.

Large horizontal blacked-out redacted area with handwritten 'E E E' to the right and a 'C' below it. A second horizontal redacted area is located below the first one.

State of Illinois, County of Cook

1930

[REDACTED]

[REDACTED]

E E E

[REDACTED]

c

Be it remembered...

[REDACTED]

B
C

B

[REDACTED]

[REDACTED]

E E E

E

[REDACTED]

B

Washington, D.C. January 1, 1957. In 1956

(D)

E E E

C

B

47

E E E

C

B

||

[REDACTED]

E E

E

B

[REDACTED]

B

C

||

[REDACTED]

E E

✓

[REDACTED]

B

C

B

[REDACTED]

B

[REDACTED] E E E
C

[REDACTED] B

[REDACTED]

B

[REDACTED] E E E
C

[REDACTED] B
C

[REDACTED]

B

[REDACTED] E E E
C

[REDACTED] b
C

[REDACTED]

[REDACTED] E E E
C

[REDACTED] B
C

45-23

1326

[Handwritten:] [REDACTED] EEE
[REDACTED]
[REDACTED] C [REDACTED] 8208
Tire & auto repair shop
[illegible] [REDACTED]
[REDACTED] C

11/11/1929

[Handwritten notes and stamps are visible on the right side of the page.]

Washington, D.C. 20540 - 1957. Apr 1329

[REDACTED]

E E

C

B

[REDACTED]

B

Washington, D.C. 20540 - 1957. Apr 1329

[REDACTED]

E E E

C

B

[REDACTED]

B

C

1957

[Redacted]

[Redacted] E E

Chas. [Redacted]

Chas. [Redacted]

[Redacted] B C

(P)

[Redacted]

Washington D.C. 1957. 10 1325

(D)

[Redacted] E E

My
with
with

Chas. [Redacted]

C

15143 15

Libary

[Redacted] B C

45-29

Washington, D.C. September 20, 1951

[REDACTED]

E E

[REDACTED]

D

Dear Mr. [REDACTED]

[REDACTED]

B

[REDACTED]

C

Sept

2	2	1	4	6	5
2	3	0	0	0	✓
2	0	8	9	8	✓
2	0	8	9	8	✓
✓	9	7	7	5	✓
✓	1	0	0	0	✓
✓	4	9	7	6	✓
✓	3	5	5	7	✓
				0	
				0	
1	3	7	2	5	0

45-24

Washington, D.C.

May 1, 1964

E E

E

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C

b

Washington, D.C. 20540 107. 1317

[REDACTED] E E

[REDACTED] C

be underweight

[REDACTED] 3

Washington, D.C. 20540 107. 1317

[REDACTED] E E

[REDACTED] C

[REDACTED] 3 C

[REDACTED]

[REDACTED]

E E
C

B

[REDACTED]

B
C

[REDACTED]

[REDACTED]

E E

C

[REDACTED]

B

[REDACTED]

B
C

Washington, D.C. January 2, 1945

[REDACTED] E E

[REDACTED]

C

Dear Mr. [REDACTED]

[REDACTED] B C

[REDACTED]

B

Washington, D.C. January 2, 1945

[REDACTED] E

[REDACTED]

C

[REDACTED] B C

[REDACTED]

B

August

[illegible]

Washington, D.C. 1002

[REDACTED]

[REDACTED]

C

[REDACTED]

[REDACTED]

B

C

Washington, D.C. 1002

[REDACTED]

E

[REDACTED]

E

[REDACTED]

C

[REDACTED]

[REDACTED]

B

C

Washington, D.C. 20540 12 1237

E E E

15

15

B

C

Washington, D.C. 20540 12 1300

E E E

C 15

B

C

Handwritten: [illegible] 1285

[Redacted block of text]

C

[Redacted block of text]

B

[REDACTED]

[REDACTED]

E E

[REDACTED]

C

[REDACTED]

B

C

[REDACTED]

[REDACTED]

E E

[REDACTED]

C

[REDACTED]

B

C

B

45.26

128:

[REDACTED] E E

[REDACTED] B

[REDACTED] E

[REDACTED] B

45-26

[REDACTED]
B

[REDACTED]
[REDACTED]
[REDACTED]
✓

E
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[REDACTED]
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[REDACTED]
B

[REDACTED]
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[REDACTED]
D

IN 1231
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[REDACTED]
b

[REDACTED] E [REDACTED] E
[REDACTED]
[REDACTED] c

[REDACTED] b
[REDACTED] c

[REDACTED]
b

[REDACTED] E [REDACTED] E
[REDACTED]
[REDACTED] c

[REDACTED] E

[REDACTED]

b

[REDACTED]

E

[REDACTED]

C

[REDACTED]

C

[REDACTED]

b

[REDACTED]

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C

[REDACTED]

B

C

[REDACTED]

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[REDACTED]

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[REDACTED]

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C

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[REDACTED]

E

[REDACTED]

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b

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[REDACTED] C

[REDACTED]

[REDACTED]

b

[REDACTED] E [REDACTED] E
[REDACTED] c

[REDACTED] c

[REDACTED]

[REDACTED]

E [REDACTED] E

C

[REDACTED]

[REDACTED]

[REDACTED]

E [REDACTED] E

C

[REDACTED]

B

B.

C

[REDACTED]

B

[REDACTED] E

[REDACTED] B
[REDACTED] C

[REDACTED] B

[REDACTED] E
[REDACTED] C

[REDACTED] B
[REDACTED] C

[REDACTED]

B

[REDACTED] E **[REDACTED]**

[REDACTED]

B

C

[REDACTED]

B

[REDACTED] E **[REDACTED]** E

C

[REDACTED]

B

C

[REDACTED]

[REDACTED]

E

E

[REDACTED]

C

[REDACTED]

[REDACTED]

C

B

[REDACTED]

Washington, D.C. [REDACTED] 1235

E

E

By [REDACTED]

[REDACTED]

C

[REDACTED]

E

B

[REDACTED]

[REDACTED]

C

[REDACTED]

Washington, D.C. [REDACTED] 1235

E

E

[REDACTED]

[REDACTED]

[REDACTED]

C

[REDACTED]

E

B

B

[REDACTED]

C

Washington, D.C. April 29, 1957. No. 1228

(D) [REDACTED] E E

5420

Pay to the order of

\$ 155.00

One hundred and fifty five dollars

W.H. Loebe-Munching

AUTHORIZED SIGNATURE

Washington, D.C. April 29, 1957. No. 1232

(D) [REDACTED] E E

Pay to the order of

C

Twenty dollars

Salary

20 Dollars

B

C

45-30

Washington, D.C. March 12, 1957. No. 1199

(D) [REDACTED] E

Pay to the order of [REDACTED] C \$250.00

Two hundred and fifty dollars

[REDACTED]

B AUTHORIZED SIGNATURE

Washington, D.C. March 12, 1957. No. 1210

(D) [REDACTED] E

Pay to the order of [REDACTED] C \$100.00

One hundred dollars

[REDACTED]

C AUTHORIZED SIGNATURE

Washington, D.C. December 1957. No. 1220

E E

C

3105

3700

B

C

Washington, D.C. December 1957. No. 1219

E E

C

5997

B

C

Washington, D.C. July 27, 1951. In 1221

D [REDACTED] E F

[REDACTED] C

[REDACTED]

[REDACTED]

[REDACTED]

Washington, D.C. July 27, 1951. In 1221

D [REDACTED] E F

[REDACTED] C

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

B

[REDACTED]
[REDACTED]
[REDACTED]

E
C

[REDACTED]
[REDACTED]

[REDACTED]

10

[REDACTED]
[REDACTED]
[REDACTED]

1222

[REDACTED]

[REDACTED]
[REDACTED]

C

20

1	4	9	7	6	✓
2	0	8	0	8	✓
2	9	8	3	3	✓
1	3	5	5	7	✓
9	7	7	5	5	✓
1	0	0	0	0	✓
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			0	0	
9	9	0	3	9	#

Washington, D.C. December 3, 1957. In 1195

(D) [REDACTED] E E

[REDACTED] C [REDACTED] 16

One hundred and fifty [REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] B C

Washington, D.C. December 3, 1957. In 1195

(D) [REDACTED] E E

[REDACTED] [REDACTED] C [REDACTED] 18

Two hundred and fifty [REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] B C

Washington, D.C. December 3, 1957. In 1195

(D) [REDACTED] E E

[REDACTED] [REDACTED] C [REDACTED] 18

Two hundred and fifty [REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] B C

Washington, D.C. 20540 1957, No. 1194

C 8165 37

71 10/10/57

B

C

Washington, D.C. 20540 1957, No. 1196

C 8177 75

75 10/10/57

B

C

Washington, D.C. 20540 1957, No. 1197

C 8178 75

75 10/10/57

B

C

45-33

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00
4225
9311
8591
7249
1603
6792
00
00
52202

11

[REDACTED]

E. ~~WAG~~

[REDACTED]

B

Washington State Highway

[REDACTED]

B

Washington State Highway

10 12 13

[REDACTED]

E. ~~WAG~~

[REDACTED]

B

[REDACTED]

B

C

B

153
L275

E E E

B.

B

C

Washington, D.C. October 15 - 1957. No 1319

(D)

E E E

D

\$85.91

91 Dollars

Eighty-five
Supplies

452

Washington, DC November 12 1957 No 1335

(D) [REDACTED] E

Phy
to
[REDACTED]

B 193

University - [REDACTED]

15412, 15413, 15474, 15788
27757

11
133- [REDACTED]

NOV 12 1957

Washington, DC November 12 1957 No 1349

(D) [REDACTED] E

[REDACTED] B

University - [REDACTED]

[REDACTED] B

B

45-34

✓1	5	7	8	0
✓1	3	8	1	0
✓1	9	2	3	0
✓1	3	7	8	0
✓1	7	1	1	0
✓1	9	6	2	0
✓2	2	6	7	0
✓1	1	0	6	0
✓1	2	1	0	0
✓1	1	9	6	0

2	4	6	8
1	6	6	7
<hr/>			
1	6	3	8

Washington, D.C. November 12, 1957. No. 1300

(D)

EE

Ch. her bill fifty-eight

supplied

[REDACTED]

B

[REDACTED]

[REDACTED]

B

[REDACTED]

[REDACTED]

B

[REDACTED]

1274

[REDACTED]

B

Washington, D.C. Dec 21 1957

[REDACTED]

Washington, D.C. Dec 21 1957

1356

[REDACTED]

[REDACTED]

B

One hundred and fifty-one

[REDACTED]

B

[REDACTED]

My
father

One hundred seventy-one

supplies

Washington, D.C.

1957

1243

1243

E

171

186

186

186

186

Washington, D.C.

1957

1225

1225

E

B

196

196

196

196

196

Washington, D.C.

1957

1208

1208

E

D

196

196

196

45-34

Washington, D.C. 10114 1957 Vol 1 1320

(D)

E E

Pay
to the
order of

R

\$ 110.42

One hundred and ten

68 Dollars

Supplies

b

Washington, D.C. August 8, 1957 Vol 1 1202

(D)

E E

Pay
to the
order of

D

\$ 121.44

One hundred and twenty one

44 Dollars

Supplies

b

1312

E E

D

B

D

1317

E E

B

B

C

D

			.00	C#10
			.00	
5	3	3	.83	
2	3	1	.00	
5	2	2	.02	
L	3	1	.76	
	8	5	.06	
			.00	
			.00	
6	0	3	.67	*

Depressed

3 4 5 7
2 3 8 2
2 5 0 0
7 1 2
1 7 5 0
0 0
0 0
1 0 8 0 1
2 3 7 5
T3176

45-31

B

Washington, D.C. May 18, 1957. No. 1250

E

B

82

Wells

Washington, D.C. May 18, 1957. No. 1240

D

E

Pay to the order of

B

17

Wells

Medical Specialists Club

MEMORANDUM FUND FOR MEDICAL RESEARCH, INC.

RECEIVED MAY 21 1957

Washington, D.C. [redacted] 1978

(D)

E E

B

County - [redacted]

B

2nd 6/10/15
[redacted]

C

		.00	C
		.00	=
		.00	*
1	7	.76	✓
1	7	.61	✓
	6	.51	✓
2	1	.98	✓
3	2	.36	✓
3	0	.91	✓
5	7	.69	✓
2	3	.09	✓
		.00	
		.00	
0	7	.91	*
2	8	.09	
<hr/>			
4	8	.00	

Washington, D.C. December 11, 1957. At 1348

(D)

2

B

Б

Washington, D.C. December 13 1957 No 1338

(D)

Rev.
Mrs.
Carmel

Seventeen

Supplies - oil

\$17.61

for Roll

B

B

Washington 11/17/57 13 1057 1242

E E

B

10/10/57

10/10/57

10/10/57

Washington 11/17/57 13 1057 1226

E E

B

10/10/57

10/10/57

B

1207
E
B
557
B
C

Washington, D.C. September 1942. 1374
(D) E
B
Twenty-three
Twenty-four
B

168

[Faint handwritten notes]

13

ニキニ

5	0	1	5	0	00	0
	1	6	0	5	00	0
1	2	3	8	1	00	0
	4	5	9	1	31	5
					00	0
6	8	7	2	8	26	7

B

(13)

1303

One hundred and twenty four
Traveler's check

8124

6th Floor

ATTACHED SIGNATURE

45-37

Washington, D.C. May 7 1957 No 1237

(D) [REDACTED] E [REDACTED]

[REDACTED] C [REDACTED] \$529

From [REDACTED] to [REDACTED] \$100 Dollars

Travel expenses 1956 [REDACTED]

[REDACTED]

Washington, D.C. May 7 1957 No 1239

(D) [REDACTED] E [REDACTED]

[REDACTED] C [REDACTED] \$235.52

Travel and [REDACTED]

Grand entrance ACS meeting [REDACTED]

[REDACTED]

SIGNATURE

Washington, D.C.

19... No. 1324

[D]

Pay to the order of

C

\$264

Two Dollars

Five hundred and eighty-four
and no/100ths

Washington, D.C.

19... No. 1229

B

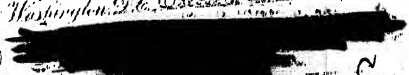

Pay to the order of


C

Two Dollars

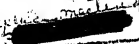
Two hundred and fifty

Washington, D.C. *11* *1957* No. 1322

(D)   *E*

 *C* *38*

Two hundred eighty-two *38* *100* *Collins*

EH *meeting* 

45

Washington, D.C.

1234

E

Per
to

C

8.59¹⁶

Fifty-nine

16 Dollars

Total

H

B

Washington, D.C.

1321

E

Per

C

PLACEMENT

Total expense

12 Dollars

45-37

B

Hesperomys [?], [?] [?]

五

c

45-30

By...

E

€

13

1

©

Washington, D.C. Dec 17, 1957. No. 1200

三

β

B



4

45-2

Washington, D.C. 20540 1284

B

[REDACTED]

E

E

By
the
Director

[REDACTED]

B

1954

1954

1954

[REDACTED]

B

[REDACTED]

E

E

[REDACTED]

B

[REDACTED]

E

45-3

to the
envelope

1000. Thoreau

General government and local government

0170-1706/96/0005-0000\$05.00/0

453

[REDACTED] B [REDACTED]
[REDACTED] C [REDACTED]
[REDACTED] E [REDACTED]

B [REDACTED] O [REDACTED] E [REDACTED]
[REDACTED] C [REDACTED]
[REDACTED]

45-30

B

26 MAY 1967 1333

E

B

Five hours

from 10:00 to 11:00

[REDACTED]

[REDACTED]

[REDACTED]

B

Washington, D.C. [REDACTED]

26 MAY 1967 1341

E

B

Five hours from 10:00 to 11:00

[REDACTED]

[REDACTED]

[REDACTED]

B

U U * U #1

0000000000	#1
0000000000	
1000	5
1000	5
150	160



Washington, D.C. December 30, 1957. No. 1375

④

5

2

2

57

One of the best examples of

By the great love of God,

Washington, D.C. March 12, 1927. No. 1252

(D) [REDACTED] E
[REDACTED] B
[REDACTED] \$1,000.
[REDACTED] 100 Dollars
[REDACTED] B
[REDACTED] AUTHORIZED SIGNATURE

Washington, D.C. August 7, 1927. No. 1257

(D) [REDACTED] E
[REDACTED] B
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

B U U U U

000000000000000000000000
000000000000000000000000
000000000000000000000000
000000000000000000000000
250000000000000000000000
205000000000000000000000
105000000000000000000000
105000000000000000000000
105000000000000000000000
50150

B
[REDACTED]

[REDACTED]

E

B

[REDACTED]

[REDACTED]

B
[REDACTED]

Washington 16 February 68 1957 1191

[REDACTED]

E

E

[REDACTED]

B

[REDACTED]

[REDACTED]

B

[REDACTED]

C

B

D

Washington, D.C. February 28 1957 No. 1192

E

B

One thousand, five hundred

1500.00

C

AUTHORIZED SIGNATURE

B

Washington, D.C. February 28 1957 No. 1192

E

B

C

AUTHORIZED SIGNATURE

Washington, D.C.

1227

E

E

B

E

Washington, D.C.

E

B

Washington, D.C.

E

B

B

B

D

Washington, D.C. September 14, 1957 12 1305

E

B

8422

B

C

[Redacted]

[Redacted]

On Thursday, September 14, 1957

[Redacted]

[Redacted]

[Redacted]

C

C

B

Washington, D.C. September 14, 1957

E

B

104

B

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

B

London (11/11)

11/11/19

1355

[REDACTED] E [REDACTED] E
[REDACTED] B

[REDACTED] B
[REDACTED] C

[REDACTED]

B

(D)

Washington, D.C.

1937 Nov

1332

[REDACTED]

Z

B

St. Louis

For Enclaves

Pathology Dept. Research

B

[REDACTED]

#45

45-39

DATE.		Approved.	Receipts	EXPENSES
21 Mar 59	FUNDS			
31 Mar 59	INVOICE #1		33333. ⁰⁰	
25 May 59	INVOICE #2		33000. ⁰⁰	100000. ⁰⁰
16 Sep 59	INVOICE #3		33667. ⁰⁰	
21 Feb 56	INVOICE #4		33000. ⁰⁰	
22 May 56	#5		33000. ⁰⁰	100000. ⁰⁰
10 Sep 56	#6		34000. ⁰⁰	
25 Jan 57	#7		33334. ⁰⁰	
3 May 57	#8		33333. ³³	100000. ⁰⁰
17 Oct 57	#9		33333. ³³	
28 Jan 58	#10		21733. ³³	
22 Apr 58	#11		21733. ³³	65200. ⁰⁰
22 Sep 58	#12		21733. ³³	
5 Feb 59	#13		35750. ⁰⁰	
11 Jun 59	#14		35750. ⁰⁰	75260. ⁰⁰
5 Jun 59	* AUTHORIZATION #2.	5760. ⁰⁰		
21 Aug 59	#15.		3760. ⁰⁰	
4 Jan 60	#16.		23833. ⁰⁰	
13 Apr 60	#17.		23833. ⁰⁰	71500. ⁰⁰
11 Aug 60	#18.		23834. ⁰⁰	
7 Apr 61	#19.		20000. ⁰⁰	
5 Oct 61	#20.		20000. ⁰⁰	20000. ⁰⁰
13 Feb 61	#21		40000. ⁰⁰	
<p>* PROPOSED 5 JUNE 59</p> <p>SENT TO FINANCE 5 JUNE 59</p> <p>A RECEIVED FROM [REDACTED] 10 July 59</p> <p>[REDACTED] RECEIVED TO [REDACTED] 10 Sept 59</p> <p>INVOICE #15 21 Aug 59</p>				

45-46

123
000

6-2500-10-001

-15-

11 AUG 1955	Anthony #3 Sub. 45	22,000.00	22,000.00
19 SEP 1955	Duma #3	22,000.00	—
3 FEB 1956	Anthony #4 Sub. 45	10,000.00	10,000.00
24 MAR 1956	Duma #4	22,000.00	67,000.00
24 MAR 1956	Duma #5	22,000.00	31,000.00
12 APR 1956	Duma #6	22,000.00	—

big

MEULERA
Sub - Project 45

Description	Date	Obligations	Expenditures	Balance		
Delayed 12	May 51	1000000		1000000		
Income #1	May 51		333300	666700		
Est 1	May 51	2700000		3366700		
Income #2	June 51		3300000	66700		
	1951		3300000	66700		
Income's total	3366700	5755				
	3300000	5755				

45-42
February 1958 - Through January 1959

RESEARCH GRANTS:

B { [REDACTED] \$36,800.00
[REDACTED] Patient Hospitalization 1,000.00 \$37,800.00
[REDACTED] 2,950.00
[REDACTED] 3,466.66 \$44,216.66

SALARIES & FEES AND SOCIAL SECURITY:

Salaries and Fees 15,478.90
Social Security 302.23 15,781.13

SUPPLIES AND SERVICES:

Special Chemicals:

B { [REDACTED] \$ 630.00
[REDACTED] 217.80
[REDACTED] 1,325.68
[REDACTED] 2,037.92 4,262.00
[REDACTED] 918.30
[REDACTED] 27.58 5,180.38

TOTAL EXPENDITURES

\$ 65,210.13

This report is supported by photostatic
copies of original checks received on [REDACTED]
[REDACTED]

B
I certify that this is a true statement.

[REDACTED]
[REDACTED]
[REDACTED]

A [REDACTED]

45-43

REPORT OF EXPENDITURES

February 1, 1957 - January 31, 1958

Research Grants:

B { [REDACTED] \$50,150.00
[REDACTED] Patient Hospitalization 1,605.00 \$51,755.00
[REDACTED] 12,381.31
[REDACTED] 4,751.95 \$ 68,728.26
Salaries, Fees and Social Security 16,917.65

Travel and Meetings:

C { [REDACTED] \$183.87
[REDACTED] 282.38
[REDACTED] 249.33
[REDACTED] 264.00
[REDACTED] 360.17
[REDACTED] 139.11 1,869.26

Special Chemicals:

B { [REDACTED] 6,280.00
[REDACTED] 2,326.21
[REDACTED] 270.80
[REDACTED] 517.40
[REDACTED] 100.00 9,894.41

Supplies:

B { [REDACTED] 1,633.83
[REDACTED] 231.00
[REDACTED] 322.02
[REDACTED] 131.76
[REDACTED] 87.06 2,603.67

Total

\$ 100,013.27

[REDACTED] D

[REDACTED] A

und
Project: MKU...RA, Subproject 45

Date Initiated: March 1953

Date Expires: February 1962

Funds-current year: \$40,000.00

Purpose: To provide funds for consultative and out-out services in the medical field as well as to conduct research on the synthesis, pharmacodynamics analysis and clinical trial of new chemical agents.

Notes: Several new laboratory techniques are being tested in relation to chemical agents which stimulate the stress reaction in human beings.

W

ACCOUNTING BY INDIVIDUAL FOR ADVANCE

NOTE: Please Instructions on Reverse

RECEIPTS

1. CASH ON HAND RECEIVING OR PAID

2. RECEIPT

3. DATE

4. AMOUNT

5. DISBURSEMENTS

6. RECEIPT

7. DATE

8. AMOUNT

1. RECEIPT

2. DATE

3. RECEIPT

4. DATE

5. AMOUNT

6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

1. RECEIPT

2. DATE

3. RECEIPT

4. DATE

5. AMOUNT

6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

1. RECEIPT

2. DATE

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6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

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6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

1. RECEIPT

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6. DISBURSEMENTS

7. RECEIPT

8. DATE

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1. RECEIPT

2. DATE

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6. DISBURSEMENTS

7. RECEIPT

8. DATE

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6. DISBURSEMENTS

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8. DATE

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6. DISBURSEMENTS

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8. DATE

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1. RECEIPT

2. DATE

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6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

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6. DISBURSEMENTS

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1. RECEIPT

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5. AMOUNT

6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

1. RECEIPT

2. DATE

3. RECEIPT

4. DATE

5. AMOUNT

6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

1. RECEIPT

2. DATE

3. RECEIPT

4. DATE

5. AMOUNT

6. DISBURSEMENTS

7. RECEIPT

8. DATE

9. AMOUNT

[Handwritten signature]

45-46

[REDACTED] B

FINANCIAL REPORT

INV 2/ February 1, 1962 to January 31, 1963

FUNDS RECEIVED		\$40,000.00
Grants In Aid	[REDACTED] B	\$40,000.00

[REDACTED] C

I have examined and approved the submitted expenditures.

[REDACTED] A

TEC/Chemical Div

Date: 7/2/63

45-42

[REDACTED]

B

FINANCIAL REPORT

INV 20
INV 19

February 1, 1961 to January 31, 1962

FUNDS RECEIVED

\$40,000.00

Grants In Aid

[REDACTED]

B

\$41,000.00

[REDACTED]

I have examined the accounts and find them correct.
[REDACTED]

[REDACTED]

TSS Chemical Division

Date: 2/20/62

45-48

M

Date 23 July 1962

Branch RS Category Chemical and Physical Manipulations (V-b)

Project Title Knockout Materials Item Classification Through Secret

Project Crypto MKULTRA Crypto Classification None

Branch Project No. R-102 Project Engineer [REDACTED]

Contractor [REDACTED] *B*

Contract No. MKULTRA #45 Task No. None

Type of Contract R&D Date Initiated February 1962

Cost \$40,000.00 Completion Date February 1963

Purpose: **This project involves the production and preliminary testing of materials which affect the "awareness" of human beings. The goal is a good "Mickey Finn."**

Status: **This project has been delayed by the loss of [REDACTED]. However, isolation and preliminary testing of a promising material first located by him are being carried out and preliminary feasibility should be established approximately on schedule.** *c*

M

[Signature]
Approved for release by NSA on 08-22-2013 pursuant to E.O. 13526

45-49

B E [REDACTED] Oct 12 1961 No 2293 E

Pay to the order of [REDACTED] \$24,000.00

Twenty four thousand dollars and NO/100 Dollars

E B [REDACTED]

RESEARCH GRANT

STYL 7

AUTHORIZED SIGNATURE

B E [REDACTED] April 27 1961 No 2179 E

Pay to the order of [REDACTED] \$25,000.00

Twenty five thousand dollars and NO/100 Dollars

E B [REDACTED]

N.E.

E C [REDACTED]

STYL 7

AUTHORIZED SIGNATURE

RECEIPT

Receipt is hereby acknowledged of the following:

Cashier's Check No. OSC 578 in the amount of \$40,000, dated
February 28, 1962, drawn on [REDACTED]
[REDACTED], payable to [REDACTED]

E

B E

[REDACTED]
Date: [REDACTED] 3/7/62

C

45-51

[Handwritten signature]

13 February 1962

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSD/Budget Officer

SUBJECT : MKULTRA, Subproject 45, Invoice #21,
Allotment 2125-1390-3902

1. Invoice No. 21 is attached covering the above subproject. Payment should be made as follows:

E
B Cashier's check in the amount of \$40,000.00 drawn on a *[redacted]* bank, payable to *[redacted]* *B*

2. The check should be forwarded to Chief, TSD/Research Branch, through TSD/Budget Officer as soon as possible.

3. This is a final invoice. However, since it is anticipated that additional funds will be obligated for this project the files should not be closed.

E
E
CHECK# *[redacted]* IN THE AMOUNT OF \$ 40,000.00.
RECEIVED. *[redacted]*
A *[redacted]* *27 Mar 62*

[redacted] *A*
Chief
TSD/Research Branch

Attachment:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee
1 - TSD/FASS
2 - TSD/RB

I CERTIFY THAT FUNDS ARE AVAILABLE
OBLIGATION REFERENCE NO. 614
DMMG TO ALLOTMENT NO. 2125-1390-3902

AUTHORIZING OFFICER

A TSD/RB/ *[redacted]* (13 Feb 62)

[Handwritten signature]

45-57
~~SECRET~~

13 February 1962

INVOICE

For Services

\$40,000.00

B
.....
CERTIFICATIONS

(1) It is hereby certified that this is invoice 21 applying to Sub-project No. 45 of MKULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSD/RB, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSD/Research Branch

Date: 13 February 1962

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum of 13 April 1961 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

11290

~~SECRET~~

45-58
6 February 1962

MEMORANDUM FOR: THE RECORD

SUBJECT : Continuation of MKULTRA, Subproject No. 45

1. The scope of this subproject includes all those activities now engaged in by [REDACTED] B under the direction of TSD/RB with the exception of those cutout functions specifically mentioned in connection with other MKULTRA subprojects. In general, the research effort under this subproject will continue along the lines laid down in previous years. These involve the synthesis and pharmacological and clinical evaluation of compounds of those chemical families known to have application in the psychochemical and "K" fields. During the coming year it is planned to concentrate more directly on the more practical aspects of the "knockout" problem. Enough new potent substances have become available lately to make such a change in emphasis worthwhile. In connection with this change it should be noted that certain findings made in C [REDACTED] project at [REDACTED] which cannot be further exploited at B that facility will be pursued at [REDACTED] in the future. For this reason it may be necessary to supplement the findings of this subproject from time to time during the year due to increases of scope.
- C 2. [REDACTED] also serves as a general consultant to the Agency, provides services of a sensitive nature on an ad hoc basis, and serves as a cutout in procurement problems.

3. The total cost of this project for a period of one year will not exceed \$40,000.00. Charges should be made against Allotment 2125-1390-3902.

4. [REDACTED] has been requested to submit a summary accounting or a copy of the Fund's annual audit report for the sponsor's inspection. Also, it has been requested that any unexpended funds shall be returned to the Agency.

5. Title to any permanent equipment purchased by funds granted

[REDACTED] shall be retained by [REDACTED]

[REDACTED] in lieu of higher overhead rates.

6. It was mutually agreed that documentation and accounting for travel expenses which are normally reimbursable by [REDACTED] shall conform with the accepted practices of the Fund.

[REDACTED]
Chief
TSD/Research Branch

APPROVED FOR OBLIGATION OF FUNDS:

[REDACTED]
Research Director

Date _____

Attachment: Proposal and Budget

Distribution: Original only

B

PROPOSAL 1962

It is proposed to continue exploration and pilot work along lines which have been developed in the investigations of the past few years in cooperation with other projects of interest to the Sponsor. The primary field of work involves the effects of stress on human beings. Major items of interest presently involve the following areas:

- (a) Creation of reliable research "tools" for study of stress phenomena in animals and man with the end in view of understanding these phenomena to the extent that practical applications can be realized in interpreting and controlling human behavior.
- (b) The production and study of new chemical and physical agents of significance in connection with the stress reactions.
- (c) The allied investigation of chemical and physical agents related to the "state of awareness" of human beings. The particular interest in this relationship is to obtain and define a separation between general activation or depression of the whole animal and the very specific "perceptual" depression or activation desirable from the psychologists' point of view.

A reasonable amount of progress is being made in the several areas indicated above and it is expected that continued efforts of the sort which have proved efficacious in the past year will yield further significant results.

WARNING NOTICE

SENSITIVE INTELLIGENCE

SOURCES AND METHODS INVOLVED

45-50

[REDACTED] B

BUDGET 1962

Salaries	\$ 30,500.00
Chemical Supplies	2,000.00
Experimental Animals and Subjects	5,000.00
Clerical Support	<u>2,500.00</u>
TOTAL	\$ 40,000.00

WARNING NOTICE
SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

SECRET

4553
Date: 8 February 1968

MEMORANDUM FOR: THE COMPTROLLER

ATTENTION : Finance Division

SUBJECT : MKULTRA, Subproject 45
Allotment of 2125-1350-3902

Under the authority granted in the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and \$40,000.00 of the over-all Project MKULTRA funds have been obligated to cover the subproject's expenses and should be charged to cost center 2125-1350-3902

 A
Chief

TSD/Research Branch

APPROVED FOR OBLIGATION
OF FUNDS:

Research Director

Date: _____

Distribution:

Original & 2 - Addressee

1 - TSD/PASS

2 - TSD/RB

SECRET

No.

Cost Account

Object Class

~~SECRET~~
(When Filled In)

SECRET


44-53
Date: 5 October 1961

MEMORANDUM FOR: THE COMPTROLLER

ATTENTION : Finance Division

SUBJECT : MKULTRA, Subproject 45

Under the authority granted in the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and 20,000.00 of the over-all Project MKULTRA funds have been obligated to cover the subproject's expenses and should be charged to cost center 3125-1390-3903.


Chief
TSD/Research Branch

APPROVED FOR OBLIGATION
OF FUNDS:

Research Director

I CERTIFY THAT FUNDS ARE AVAILABLE.
OBLIGATION REFERENCE NO. 612
CHARGE TO ACCOUNT NO. _____

ANALYST/CHIEF OF CENTER

Date: _____

Distribution:

Original & 2 - Addressee

1 - TSD/FASS

2 - TSD/RB

SECRET

95-56
SECRET

Date: 8 February 1962

MEMORANDUM FOR: THE COMPTROLLER

ATTENTION : Finance Division

SUBJECT : MKULTRA, Subproject 45
Allotment # 2125-1390-3902

Under the authority granted in the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and \$40,000.00 of the over-all Project MKULTRA funds have been obligated to cover the subproject's expenses and should be charged to cost center 2125-1390-3902

A [REDACTED]
Chief
TSD/Research Branch

APPROVED FOR OBLIGATION
OF FUNDS:

A [REDACTED]
Research Director

Date: 1 FEB 1962

Distribution:

Original & 2 - Addresses

X - TSD/FASS
2 - TSD/RB

I CERTIFY THAT FUNDS ARE AVAILABLE
OBLIGATION REFERENCE NO. _____
DANCE TO ALLOTMENT NO. _____

AUTHORIZING OFFICER

SECRET

RECEIPT

Receipt is hereby acknowledged of the following:

Treasurer's Check No. 186234 in the amount of \$20,000, dated
11 October 1961, drawn on [REDACTED]

E
B

payable to [REDACTED]

E
B

C

Date;

Oct 11, 1961

Downgraded to: CONFIDENTIAL
by authority of: 187475
Date: June 1977

E2 IMPDET; CL BY 187475

31 March 1961

MEMORANDUM FOR: THE RECORD

SUBJECT : Continuation of MKULTRA, Subproject No. 45

1. The scope of this subproject includes all those activities now engaged in by [REDACTED] under the direction of TSD/RB with the exception of those cutout functions specifically mentioned in connection with other MKULTRA subprojects. In general, the research effort under this subproject will continue along the lines laid down in previous years. These involve the synthesis and pharmacological and clinical evaluation of compounds of those chemical families known to have application in the psychochemical and "K" fields. During the past year important progress has been made in the area related to stressor compounds and the relationship of these materials to the physiological pathways through which both stress and the reaction to it are mediated in human beings. Also, several new and important animal screening techniques adapted to the study of materials which depress the general awareness of animals without producing any accompanying physical depression have been made available for work on "knockout" materials. In addition, some progress has been made in relating certain organic chemical structures to observed effects on animals. A considerable part of next year's effort will be aimed at extending our ability to understand the structure-activity relationships among these sleep-producing materials.

Downgraded to: CONFIDENTIAL
by authority of: 187475
Date: June 1977

E2 IMPDET; CL BY 187475

E2 IMPDET; CM BY 187475

2. [REDACTED] also serves as a general consultant to the Agency, provides services of a sensitive nature on an ad hoc basis, and serves as a cutout in procurement problems.

3. The total cost of this project for a period of one year will not exceed \$40,000.00. (However, at the present time the project will only be extended for a period of ^{SIX} ~~three~~ months. The cost of this project for this period will not exceed \$20,000.00.) Charges should be made against Allotment 1125-1390-3902. (It is anticipated that the remainder of the funds for the project year will be made available from FY-62 money when available.)

4. [REDACTED] has been requested to submit a summary accounting or a copy of [REDACTED] annual audit report for the sponsor's inspection. Also, it has been requested that any unexpended funds shall be returned to the Agency.

5. Title to any permanent equipment purchased by funds granted

[REDACTED] shall be retained by [REDACTED] in lieu of higher overhead rates.

6. It was mutually agreed that documentation and accounting for travel expenses which are normally reimbursable by [REDACTED] shall conform with the accepted practices of [REDACTED]

APPROVED FOR OBLIGATION OF FUNDS:

A [REDACTED]
Research Director

Date _____

Chief
TSD/Research Branch

APPROVED FOR ADDITIONAL OBLIGATION
OF FUNDS: (\$20,000.00 against
Allotment 2125-1390-3902

A [REDACTED]
Research Director
Date _____

45-59

PROPOSAL 1961

It is proposed to continue exploration and pilot work along lines which have been developed in the investigations of the past few years in cooperation with other projects of interest to the Sponsor. The primary field of work involves the effects of stress on human beings. Major items of interest presently involve the following areas:

- a) Creation of reliable research "tools" for study of stress phenomena in animals and man with the end in view of understanding these phenomena to the extent that practical applications can be realized in interpreting and controlling human behavior.
- b) The production and study of new chemical and physical agents of significance in connection with the stress reactions.
- c) The allied investigation of chemical and physical agents related to the "state of awareness" of human beings. The particular interest in this relationship is to obtain and define a separation between general activation or depression of the whole animal and the very specific "perceptual" depression or activation desirable from the psychologists' point of view.

A reasonable amount of progress is being made in the several areas indicated above and it is expected that continued efforts of the sort which have proved efficacious in the past year will yield further significant results.

As indicated in the attached budget, the total research effort will amount to \$71,500.00. We are requesting that the present Sponsor fund only \$40,000.00 of this effort with the remainder to be provided from private sources.

c [REDACTED]

WARNING NOTICE
SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

RESEARCH PROPOSAL 1961

BUDGET

1. PHARMACOLOGY AND TOXICOLOGY

Pharmacologist and technician

\$12,000.00

C [REDACTED]

\$10,000.00

Animal caretaker, animals & animal maintenance

\$12,000.00

\$34,000.00

2. CLINICAL SCREENING

Clinical assistance

\$12,000.00

Clerical help and supplies

\$5,000.00

\$17,000.00

3. CHEMICAL SYNTHESIS

C [REDACTED] Consultant

\$1,500.00

C [REDACTED]

\$5,000.00

C [REDACTED]

\$10,000.00

\$16,500.00

Chemical Supplies

\$4,000.00

\$4,000.00

TOTAL

\$71,500.00

WARNING NOTICE
SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

CONFIDENTIAL FUNDS POSTING VOUCHER

VOUCHER NO. 7-12

DATE 1-6

VOUCHER NO. 7-12

DESCRIPTION - ADVANCE ACCOUNTS 13-27	37-39 FUND CODE	40-42 EXPEND CODE	43 U	44-46 PER. LEO. D CODE	47-52 REF. NO.	53 CA LEO. VY	54-57 ACT. NO.	58-59 ACT. NO.	60-70 DATE	71-80 AMOUNT
SUB 45-100-20		58-21			614		6110	95-1390-3902	7-52	20-00-00
ATK 45-100-20					108-1100		437			20-00-00

EXPLANATION OF ENTRY

TOTALS

for attached
PAID
 100-100-20
 \$ 989
 100-100-20

DATE 10/10/61

REVIEWED BY

DATE

CERTIFIED FOR PAYMENT OR CREDIT

SIGNATURE OF CERTIFYING OFFICER

FORM 10-55

606 USE PREVIOUS EDITIONS.

SECRET

100-100

45-61

5 October 1961

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSD/Budget Officer

SUBJECT : MKULTRA, Subproject 45, Invoice No. 20
Allotment 2125-1390-3902

1. Invoice No. 20 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$20,000.00 drawn on
a local bank.

The check should be made payable to the ~~██~~

2. The check should be forwarded to Chief, TSD/Research Branch,
through TSD/Budget Officer, as soon as possible.

3. This is a final invoice. However, since it is anticipated that
additional funds will be obligated for this project the files should not be
closed.

CHECK # 116-37
RECEIVED

~~██~~ A
Chief
TSD/Research Branch

Attachment:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee

1 - TSD/FASS
2 - TSD/RB

TSD/RB/██████████ (5 October 1961)

I CERTIFY THAT THE FOLLOWING IS A TRUE AND CORRECT
OBLIGATION STATEMENT NO. 61
ON 10/10/61 BY 2125-1390-3902
AUTHORIZING OFFICER

45-61

SECRET

INVOICE

For Services

5 October 1961

20,000.00

*Forwarded
9 Oct 61*

CERTIFICATIONS

(1) It is hereby certified that this is Invoice 20 applying to Sub-project No. 45 of MKULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSD/RB, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSD/Research Branch

Date: _____

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum of 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date: _____

SECRET

45-62

D

S E C R E T

Date: 8 October 1961

MEMORANDUM FOR: THE COMPTROLLER

ATTENTION : Finance Division

SUBJECT : MKULTRA, Subproject 45

Under the authority granted in the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and 20,000.00 of the over-all Project MKULTRA funds have been obligated to cover the subproject's expenses and should be charged to cost center 2125-1378-3702.

~~XXXXXXXXXX~~
A
TSD/Research Branch

APPROVED FOR OBLIGATION
OF FUNDS:

Research Director

Date: _____

Distribution:

Original & 2 - Addressee

- 1 - TSD/FASS
- 2 - TSD/RB

S E C R E T

4-63

4/5

RECEIPT

Receipt is hereby acknowledged of the following:

~~_____~~ Check ~~_____~~ in the amount of \$20,000, dated
14 April 1961, drawn on the ~~_____~~
~~_____~~, payable to the ~~_____~~
B

~~_____~~
Date 4/17/61
C

(When Filled In)

No.

Cost Account

Object Class

[illegible]

SECRET

(When Filled In)

45-65

SECRET

DATE: 31 March 1961

MEMORANDUM FOR : THE COMPTROLLER

ATTENTION : Finance Division

SUBJECT : MKULTRA, Subproject 45

Under the authority granted in the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and \$20,000.00 of the over-all Project MKULTRA funds have been obligated to cover the subproject's expenses and should be charged to cost center 1125-1390-3902.

~~XXXXXXXXXX~~ A
Chief
TSD/Research Branch

APPROVED FOR OBLIGATION
OF FUNDS:

~~XXXXXXXXXX~~ A
Research Director

6 1867
I CERTIFY THAT FUNDS ARE AVAILABLE.
OBLIGATION REFERENCE NO. 1125
CHARGE TO ALLOTMENT NO. _____

AUTHORIZING OFFICER

Date:

Distribution:

Orig. & 2 - Addressee

SECRET

VOUCHER NO. 7-12										VOUCHER NO. 7-12									
DATE 2-6										DATE 2-6									
DESCRIPTION-ALL OTHER ACCOUNTS 13-33										DESCRIPTION-ALL OTHER ACCOUNTS 13-33									
ADVANCE ACCOUNTS 13-27										ADVANCE ACCOUNTS 13-27									
P.C. NO.										P.C. NO.									
PROJECT NO.										PROJECT NO.									
EXPEND										EXPEND									
CODE										CODE									
40-42										40-42									
43										43									
44-46										44-46									
47-52										47-52									
53										53									
54-57										54-57									
58-70										58-70									
71-80										71-80									
SUB PROJ 45 INV 19										SUB PROJ 45 INV 19									
MKULTRA										MKULTRA									
8811										8811									
1821										1821									
601.0 25-1390-3902										601.0 25-1390-3902									
105 - 1102										105 - 1102									
267										267									
TOTALS										TOTALS									
4/12/61										4/12/61									
PREPARED BY										PREPARED BY									
DATE										DATE									
REVIEWED BY										REVIEWED BY									
DATE										DATE									
SIGNATURE OF CERTIFYING OFFICER										SIGNATURE OF CERTIFYING OFFICER									
CERTIFIED FOR PAYMENT ON CREDIT										CERTIFIED FOR PAYMENT ON CREDIT									

FORM 606 USE PREVIOUS EDITIONS.

SECRET

CERTIFIED FOR PAYMENT OR CREDIT

45-67
SECRET

DATE: 31 March 1961

MEMORANDUM FOR : THE COMPTROLLER
ATTENTION : Finance Division
SUBJECT : MEXMERA, Subproject 45

Under the authority granted in the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and \$2,000.00 of the over-all Project MEXMERA funds have been obligated to cover the subproject's expenses and should be charged to cost center 1125-1390-3902.

~~XXXXXXXXXX~~ *[Signature]*
Chief
TSD/Research Branch

APPROVED FOR OBLIGATION
OF FUNDS:

~~XXXXXXXXXX~~ *[Signature]*
Research Director

Date:

Distribution:
Orig. & 2 - Addressee

4347
SECRET

SECRET

7 April 1961

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSD/Budget Officer

SUBJECT : MEXLETA, Subproject 45, Invoice No. 19
Allotment 1125-1390-3902

1. Invoice No. 19 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$20,000.00 drawn on
a local bank.

The check should be made payable to the ~~████████████████████~~ **B**

2. The check should be forwarded to Chief, TSD/Research Branch,
through TSD/Budget Officer, no later than Thursday, 13 April 1961.

3. This is a final invoice. However, since it is anticipated
that additional funds will be obligated for this project the files
should not be closed.

~~████████████████████~~ **A**
Chief
TSD/Research Branch

Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee

1 - TSD/FASB

1 - TSD/RB

TSD/RB/██████████ (7 April 1961)

CHECK # 265558
RECEIVED IN THE AMOUNT OF \$20,000.

45-68
SECRET

INVOICE

For Services

B \$20,000.00

STATEMENT OF WORK

(1) It is hereby certified that this is invoice 19 applying to sub-project No. 15 of MCMIRA, that performance is satisfactory, that services are being accomplished in accordance with actual agreements, that a detailed system of the payments and receipts is on file in TSO/PI, that this bill is just and correct and that payment thereon has not yet been made.

DATE, TSO/Research Branch

Date: 7 April 1961

(2) It is hereby certified that this invoice applies to Subproject of MCMIRA which was duly approved, and that the project is being carried out in accordance with the memorandum of 13 April 1959 from the DIT to the DC/A, and the extension of this authority in subsequent memoranda.

RESEARCH BRANCH

Date:

SECRET

SECRET

45-69
DATE: 31 March 1961

MEMORANDUM FOR : THE COMPTROLLER
ATTENTION : Finance Division
SUBJECT : MKULERA, Subproject 45

Under the authority granted in the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and \$20,000.00 of the over-all Project MKULERA funds have been obligated to cover the subproject's expenses and should be charged to cost center 1125-1390-3902.


Chief
TSD/Research Branch

APPROVED FOR OBLIGATION
OF FUNDS:

Research Director

Date:

Distribution:

Orig. & 2 - Addressee

SECRET

FINANCIAL REPORT JANUARY 31, 1960 - FEBRUARY 1, 1961

SALARIES	\$16,546.95
SUPPLIES & MATERIALS	\$7,312.76
GRANTS IN AID	
B: [REDACTED]	\$33,600.00
	\$12,433.87
	<u>733.33</u>
	\$47,767.20 ✓
TOTAL	\$71,726.91

I certify to the best of my knowledge that this statement is correct.

Date 10/20/61

4 Jan 1960

23833

Jan 16

13 Apr -

23833

" 17

11 Aug 1960

23834

" 18

71,500

I have examined and approved the submitted expenditure...

A
[REDACTED]
TSS, Chemical Division

Date: 10/20/61

RECEIPT

Receipt is hereby acknowledged of the following:

E- [REDACTED] No. 043215 in the amount of \$23,834.00 E

drawn on [REDACTED] payable

to the [REDACTED]

Date

8/26/60

1 SECRET

45-72
11 August 1960

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSD/Budget Officer

SUBJECT : MEULTRA, Subproject 45, Invoice No. 18
Allotment 0525-1009-4902

1. Invoice No. 18 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$23,834.00 drawn
on a ~~bank~~ bank.

The check should be made payable to the ~~United States Government~~ **B**

2. The check should be forwarded to Chief, TSD/Research Branch,
through TSD/Budget Officer, no later than Thursday, 25 August 1960.

3. This is a final invoice. However, since it is anticipated
that additional funds will be obligated for this project the files
should not be closed.

~~Chief~~ **A**
Chief
TSD/Research Branch

Attachment:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee
1 - TSD/FASB

16 AUG 1960
I CERTIFY THAT FUNDS ARE AVAILABLE
OBLIGATION REFERENCE NO. 1215
CHARGE TO ALLOTMENT NO. 0525-1009-4912

AUTHORIZING OFFICER
~~Chief~~ **E**

CHECK# _____ IN THE AMOUNT OF \$23,834.⁰⁰
25 AUG 1960 RECEIVED.

SECRET

45-72

\$23,834.00

[REDACTED]

(1) It is hereby certified that this is Invoice No. 18 applying to Subproject 45 of MUMUKTA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSD/MS, that this bill is just and correct and that payment thereof has not yet been made.

1

Date: _____

his
and

Date: _____

SECRET

RECEIPT

Acknowledged herewith receipt of the following check:

Official Check No. ~~44-38861~~^E dated April 21, 1960, in the amount ~~E~~

of ~~Five Hundred and no/100 Dollars~~^E drawn on ~~United States Treasury Department~~

payable to ~~John Edgar Hoover~~^B

Date: 4-25-60

SECRET

13 April 1960

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSD/Budget Officer

SUBJECT : MKULTRA, Subproject 45, Invoice No. 17
Allotment 0525-1009-4902

1. Invoice No. 17 covering the above subproject is attached.
Other invoices will follow. Payment should be made as follows:

Cashier's check in the amount of \$23,833.00 drawn
on a [REDACTED] bank. E

The check should be made payable to the [REDACTED] B

2. The check should be forwarded to Chief, TSD/Chemical
Branch, through TSD/Budget Officer, no later than 27 April 1960.

[REDACTED] A
Chief
TSD/Chemical Branch

Attachment:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee

- 1 - TSD/FASS
- 2 - TSD/CB

TSD/EB/[REDACTED] A

I CERTIFY THAT FUNDS ARE AVAILABLE
OBLIGATION REFERENCE NO. 1288
CHARGE TO ALLOTMENT NO. [REDACTED]

ADMINISTRATIVE OFFICE

15 APR 60

[REDACTED] B
CHECK [REDACTED] B
IN THE AMOUNT OF \$23,833.00
RECEIVED.

SECRET

45-75
SECRET

INVOICE

For Services

\$23,833.00

[REDACTED] B

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 17 applying to Subproject 45 of MKULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSD/CB, that this bill is just and correct and that payment thereof has not yet been made.

C/TSD/Chemical Branch

Date: _____

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date: _____

SECRET

45-76

B

Handwritten signature

RECEIPT

Acknowledged herewith receipt of the following check:

Check No. 038925, dated 13 January 1960, in the amount of \$23,833.00, drawn on The [redacted] payable to [redacted]

[redacted]

DATE 1/20/60

SECRET

4 January 1960

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MKULTRA, Subproject 45, Invoice No. 16
Allotment 0525-1009-4902

1. Invoice No. 16 covering the above subproject is attached. Other invoices will follow. Payment should be made as follows:

Cashier's check in the amount of \$23,833.00 drawn on a ~~check~~

The check should be made payable to the ~~Government of the United States of America~~

2. The check should be forwarded to Chief, TSS/Chemical Division, through TSS/Budget Officer, no later than 18 January 1960.

~~XXXXXXXXXXXXXXXXXXXX~~
Chief
TSS/Chemical Division

Attachment:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee

1 - TSS/FASB
2 - TSS/CD

I CERTIFY THAT FUNDS ARE AVAILABLE;
OBLIGATION REFERENCE NO. ~~XXXXXXXXXXXX~~
CHARGE TO ALLOTMENT NO. ~~XXXXXXXXXXXX~~

AUTHORIZING OFFICE

CHECK ~~XXXXXXXXXX~~ IN THE AMOUNT OF \$23,833.00
RECEIVED.

SECRET

45-77

For services

\$23,833.00

(1) It is hereby certified that this is Invoice No. 16 applying to Subproject 45 of MKULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements; that a detailed agenda of the payments and receipts is on file in TSS/CD; that this bill is just and correct and that payment thereof has not yet been made.

Date: _____

(2) It is hereby certified that this invoice applies to Subproject 29 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Date: _____

SECRET

Downgraded to: ~~CONFIDENTIAL~~
by authority of: 187475
date: June 1977

E2 IMPDET; CL BY 187475

29 December 1959

MEMORANDUM FOR: THE RECORD

SUBJECT : Continuation of MKULTRA, Subproject No. 45

1. The scope of this subproject includes all those activities now engaged in by ~~TSB/CD~~ ^B ~~TSB/CD~~ under the direction of TSB/CD with the exception of those cutout functions specifically mentioned in connection with other MKULTRA subprojects. In general, the research effort under this subproject will continue along the lines laid down in previous years. These involve the synthesis and pharmacological and clinical evaluation of compounds of those chemical families known to have application in the psychochemical and "K" fields. During the past year important progress has been made in the area related to stressor compounds and the relationship of these materials to the physiological pathways through which both stress and the reaction to it are mediated in human beings. As is indicated in the attached proposal, the work of the past year has progressed to the point where more definitive experiments on the stress reaction can be carried out. Primarily this was brought about by the characterization of several new materials which produce stress reaction in humans and the application of some new clinical methods of measuring the extent of the disturbance produced. During the next year proportionally more effort will be expended on the problem of the development of new ~~TSB/CD~~

Downgraded to: ~~CONFIDENTIAL~~
by authority of: 187475
date: June 1977
E2 IMPDET; CL BY 187475

E2 IMPDET; CL BY 187475

"knock-out" types of agents since progress has been slower than is desirable in this direction and because a new approach to the problem has been worked out. //

2. ~~██████████~~^C also serves as a general consultant to the Agency, provides services of a sensitive nature on an ad hoc basis, and serves as a cut-out in procurement problems.

3. The total cost of this project for a period of one year will not exceed ^{40,500.00} \$71,500.00. Charges should be made against Allotment 0525-1009-4902.

4. ~~██████████~~^C has been requested to submit a summary accounting or a copy of the Fund's annual audit report for the sponsor's inspection. Also, it has been requested that any unexpended funds shall be returned to the Agency.


5. Title to any permanent equipment purchased by funds granted ~~██████████~~^C shall be retained by ~~██████████~~^B ~~██████████~~, in lieu of higher overhead rates.


6. It was mutually agreed that documentation and accounting for travel expenses which are normally reimbursable by ~~██████████~~^B ~~██████████~~^B shall conform with the accepted practices of the Fund.

Downgraded to: **CONFIDENTIAL**
by authority of: 187475
date: June 1977

EO IMPDET; CL BY 187475

-3-

7.  agreed to comply with the requirements of the Memorandum of Agreement.


Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION
OF FUNDS:


Research Director

Date: 12/30/59

Attachment:
Proposal

Distribution:
Original only

Downgraded to: **CONFIDENTIAL**
by authority of: 187475
date: June 1977

EO IMPDET; CL BY 187475

RESEARCH PROPOSAL

1960

The research to be undertaken during the twelve month period for which financial support is requested will be devoted to the continued analysis of the neural and endocrine mechanism of stress and the chemical agents that influence it. The screening procedures are based largely upon a further analysis of phases of stress and the influences of this physiologic behavior complex upon both body and skin temperatures as detailed in the accompanying report.

The chemical syntheses of new compounds will be continued
B at the [REDACTED] under the supervision of [REDACTED] C
C [REDACTED] and at the [REDACTED] under the supervision B
C of [REDACTED]. These chemical agents will be screened for
their capacity to provoke stress or to suppress the stress reaction
in its acute or chronic phases. Animal testing will include pharmacologic screening and proper toxicity studies of these compounds as heretofore.

Chemical agents that have been found active and within a suitable toxicity range will be subjected to clinical screening on appropriate patients, the initial screening being carried out on advanced cancer patients. The amount of money devoted to chemical syntheses, however, has been further reduced. Chemical compounds available from biologic sources as well as those synthesized in the project will be screened, particularly those that are active in either raising or lowering body temperature.

As heretofore any agents which prove to be of interest in cancer will be subjected to further evaluation both on transplanted

Page 2

animal tumors and on cancer patients. This cancer phase of the project will be considered a by-product of the major objective, which will be directed to the problem of stress.

WARNING NOTICE

SENSITIVE INTELLIGENCE -
SOURCES AND METHODS INVOLVED

RESEARCH PROPOSAL

1960

1- PHARMACOLOGY AND TOXICOLOGY

Pharmacologist and technician

\$12,000.00

 toxicology

10,000.00

Animal caretaker, animals and animal maintenance

12,000.00

\$34,000.00

2- CLINICAL SCREENING

Clinical assistants

\$12,000.00

Clerical help and supplies

5,000.00

\$17,000.00

3- CHEMICAL SYNTHESIS

 Consultant

\$1,500.00

5,000.00

10,000.00

\$16,500.00

Chemical supplies

4,000.00

\$20,500.00

TOTAL

\$71,500.00

45-80
SECRET

29 December 1959

MEMORANDUM FOR: COMPTROLLER

ATTENTION : Finance Division

**SUBJECT : MKULTRA, Subproject 45, Additional
Authorization No. 9**

Under the authority granted in the memorandum dated 13 April 1959, from the DCI to the DD/A and the extension of this authority in subsequent memoranda, Subproject 45 was previously approved. Under the same authority an additional sum of \$71,500.00 has been authorized to cover the subproject's expenses, to be charged to Allotment ~~XXXXXXXXXXXX~~.

~~XXXXXXXXXXXX~~ **A**
Chief
TSS/Chemical Division

**APPROVED FOR OBLIGATION
OF FUNDS:**

Original signed by

~~XXXXXXXXXXXX~~ **A**
Research Director

Date: 30 DEC 1959

**Distribution:
Orig & 2 - Addressee**

- 1 - TSS/OC
- ✓ 1 - TSS/FASB
- 2 - TSS/CD **A**

TSS/CD ~~XXXXXXXXXXXX~~ (29 Dec 59)

I CERTIFY THAT FUNDS ARE AVAILABLE;
OBLIGATION REFERENCE No. ~~XXXXXXXXXXXX~~
CHARGE TO ALLOTMENT No. ~~XXXXXXXXXXXX~~

AUTHORIZING OFFICER

SECRET

95-81
SECRET

21 August 1959

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer
SUBJECT : MKULTRA, Subproject 45, Invoice No. 15
Allotment 9-2502-75-902

1. Invoice No. 15 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$3,760.00,
drawn on a ~~bank~~ bank.

The check should be made payable to the ~~██████████~~ *B*
~~██████████~~

2. Please forward the check to Chief, TSS/Chemical Division,
through TSS Budget Officer, no later than 3 September 1959.

3. This is a final invoice. However, since it is anticipated
that additional funds will be obligated for this project the files should
not be closed.

~~██████████~~
Chief

TSS/Chemical Division

Attachment:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee

1 - TSS/FASB

2 - TSS/CD

TSS/CD/ ~~██████████~~ *A*

SECRET

45-81
SECRET

INVOICE

For services

\$3,760.00

[REDACTED]

CERTIFICATIONS

(1) It is hereby certified that this is invoice No. [REDACTED] applying to Subproject 45 of MKULTRA, that performance [REDACTED] satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Date: _____

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date: _____

SECRET

mk ultra -45-82
75
3 July 1959

I hereby acknowledge receipt of cashier's check in the
amount of \$3,760 representing a research grant from the

~~██~~ B

~~██~~ C

10 July 1959
Date

RECEIPT

Acknowledged herewith receipt of the following check:

Treasurer's Check No. ~~████████~~ dated 3 September 1959, in
the amount of \$3,760.00, drawn on ~~██~~ B
~~██~~, payable to ~~██~~ B
~~██~~

~~██~~ C

DATE 10 Sep 1959

45-83

MEMORANDUM RECEIPT

TO:

FROM:

SUBJECT:

22 JUN 1955

DATE

I hereby acknowledge receipt of the following:

226. Sub 95
JW of

CHECK ~~REMAIN~~ THE AMOUNT OF \$35.50-22.
RECEIVED. 22 JUN 1955

Please return _____ signed copy (ies) of this receipt

SIGNATURE OF RECEIPT

To

FORM NO. 752
1 AUG 55 REPLACES FORM 34-46
WHICH MAY BE USED.

DATE RECEIVED

22 JUN 1955

(23)

SECRET

5 June 1959

MEMORANDUM FOR: THE COMPTROLLER
ATTENTION: Finance Division
SUBJECT: NEUTRA, Subproject 15, Additional
Authorization No. 6

Under the authority granted in the Memorandum dated
13 April 1958 from the DDI to the DD/A, and the extension of
this authority in subsequent memoranda, Subproject 15 was
previously approved. Under the same authority an additional
sum of \$1,760.00 has been authorized to cover the subproject's
expenses and should be charged to Allotment 9-2502-75-202.

~~XXXXXXXXXX~~
Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS:

Research Director

Date: _____

Distribution:
Orig & 2 - Addresses

- 1 - TSS/OC
- 1 - TSS/TASB
- 2 - TSS/CD

SECRET

SECRET

TO: TSS/CD

This is an invoice against previously obligated funds.

1. Date of Obligation: January 59
2. Purpose of Project: Study of Stressor materials and the Stress Reaction.
3. Progress to Date: Satisfactory
4. Expiration Date: January 60
5. Project Monitor: Dr. [REDACTED] A

FROM: TSS/CD

Room B-10, West Outbuilding, Ext. 8904

SECRET

Downgraded to: ~~CONFIDENTIAL~~
by authority of: 187475
date: June 1977

DRAP

45-86

E2 IMPDET; CL BY 187475

5 June 1959

MEMORANDUM FOR THE RECORD

SUBJECT: Supplement to Project MKULTRA, Subproject 45

1. One of the activities that the [REDACTED] engages in on behalf of the Agency is the procurement of rare chemical substances required for the various chemical and physiological research programs being carried on in TSS/CD. Some of these materials are derived from direct synthetic programs under the direction of the Fund and others are purchased as such from domestic or foreign sources when the opportunity to do so appears.

2. The purpose of this supplement to Subproject 45 is to add the sum of \$3760.00 to allow the expansion of the above portion of the [REDACTED] activities during the remainder of this year. This additional work has been made necessary because of developments which have taken place in other parts of the research program being carried out by TSS/CD which have occurred since the original allotment for the [REDACTED] was made.

3. All provisions of the original memorandum establishing the present grant to the [REDACTED] will apply to this supplement. The original allotment for Subproject 45 approved on 4 February 1959 was \$71,500.00. The amount of \$3760.00 (charges should be made against Allotment 9-2502-75-902) should be added to this to bring the total for this year to a total of \$75,260.00.

Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS

Research Director

Date

6/8/59

Attachment:

Orig. Memo. Only
Budget

Downgraded to: ~~CONFIDENTIAL~~
by authority of: 187475
date: June 1977

E2 IMPDET; CL BY 187475

PROPOSED BUDGET

It is proposed to obtain certain substituted Indole compounds of types designated by the Sponsor from various synthetic programs being carried out in industrial facilities and to characterize these materials for the Sponsor's use in various physiological programs. It is estimated that the following budget will be required for six months:

Salaries.....	\$3,000.00
Travel.....	500.00
Supplies.....	260.00
Total	<u>\$3,760.00</u>

RECEIPT

Acknowledge herewith receipt of the following check:

Treasurer's check ~~_____~~ dated June 17, 1959, in the
amount of \$35,750.00, drawn on ~~_____~~
~~_____~~, payable to ~~_____~~ **B** ~~_____~~ **E**

Date

13 June 59

SECRET

11 June 1959

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MKULTRA, Subproject 45, Invoice No. 14
Allotment 9-2502-75-902

1. Invoice No. 14 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$35,750.00,
drawn on ~~XXXXXXXXXX~~ E

The check should be made payable to the ~~XXXXXXXXXX~~
~~XXXXXXXXXX~~ B

2. Please forward the check to Chief, TSS/Chemical Division,
through TSS Budget Officer, no later than 22 June 1959. Other
invoices will follow.

A ~~XXXXXXXXXX~~
Chief

- TSS/Chemical Division

Attachments:
Invoice & Certifications

Distribution:

Orig & 2 - Addressee

1 - TSS/FASB

2 - TSS/CD

TSS/CD ~~XXXXXXXXXX~~ (11 June 59) A

SECRET

SECRET

15-88

INVOICE

For services

\$35,750.00

5

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 14 applying to Subproject 45 of MKULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

C/TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

SECRET

RECEIPT

Acknowledged herewith receipt of the following check:

Cashier's Check No. UT 4641, dated February 16, 1959,
in the amount of \$3,750.00, drawn on
[REDACTED] payable to
[REDACTED]

B

Date:

2/24/59

45-90

1715

Q. 2502-75-102

ALLEGES

[illegible]

SECRET

45-91

5 February 1959

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MINUTRA, Subproject A5, Invoice No. 13
Allotment 9-2502-75-502

1. Invoice No. 13 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$35,750,
drawn on a ~~check~~ E

The check should be made payable to the ~~Minutra Subproject A5~~
B

2. Please forward the check to Chief, TSS/Chemical Division,
through TSS Budget Officer, no later than 12 February 1959. Other
invoices will follow.

A ~~Minutra Subproject A5~~
Chief
TSS/Chemical Division

Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee

1 - TSS/FASB
2 - TSS/CD
TSS/CD (5Feb59) A E

I CERTIFY THAT FUNDS HAVE BEEN OBLIGATED
OBLIGATION REFERENCE NO. 1215
CHARGE TO ALLOTMENT No. 9-2502-75-502
AUTHORIZING OFFICER

CHECK # ~~4544~~ IN THE AMOUNT OF \$35,750 RECEIVED.
A

SECRET

45-91-

INVOICE

For services

\$35,750.00

B [REDACTED]

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 13 applying to Subproject 45 of MKULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipt is on file in TBS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TBS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

TO: TSS/CD

1. Date of Obligation: January 59
2. Purpose of Project: Study 7
Storm materials and the stress
resilience
3. Progress to Date: Substantive
at full
4. Expiration Date: January 60
5. Project Monitor: [REDACTED]

FROM: TSS/CD

Room B-10, West Outbuilding, Ext. 8612

SECRET

SECRET

27 January 1959

MEMORANDUM FOR: CONTROLLER

ATTENTION : Finance Division

SUBJECT : MEMPHIS, Subproject 45, Additional
Authorization No. 7

Under the authority granted in the memorandum dated 13 April 1953, from the DCI to the ID/A and the extension of this authority in subsequent memoranda, Subproject 45 was previously approved. Under the same authority an additional sum of \$71,500.00 has been authorized to cover the subproject's expenses, to be charged to Allotment 9-2502-75-902.

~~XXXXXXXXXX~~
Chief

TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS:

Research Director

Date: _____

Distribution:

Orig & 2 - Addressee

1 - TSS/OC

1 - TSS/FASB

2 - TSS/CD

TSS/CD: ~~XXXXXX~~ (27 Jan 59)

SECRET

SECRET

TO: TSS/CO

This is an invoice against previously obligated funds.

1. Date of Obligation: 27 Jan 1959
2. Purpose of Project: Analysis of hypothalamic & endocrine mechanism of stress & chemical agents that modify it.

3. Progress to Date: Satisfactory

4. Expiration Date: 27 Jan 1960

5. Project Monitor: [REDACTED] A

FROM: TSS/CO

Room 3-0, West Outbuilding, Lab. [REDACTED] G

SECRET

45-95
Downgraded to: ~~CONFIDENTIAL~~
by authority of: 137475
date: June 1977

E2 IMPDET; CL BY 187475

26 January 1959

MEMORANDUM FOR: THE RECORD

SUBJECT : Continuation of MKULTRA, Subproject No. 45

1. The scope of this subproject includes all those activities now engaged in by the [REDACTED] B
under the direction of TBS/CD with the exception of those output functions specifically mentioned in connection with other MKULTRA subprojects. In general, the research effort under this subproject will continue along the lines laid down in previous years. These involve the synthesis and pharmacological and clinical evaluation of compounds of those chemical families known to have application in the psychochemical and "K" fields. During the past year important progress has been made in the area related to stressor compounds and the relationship of these materials to the physiological pathways through which both stress and the reaction to it are mediated in human beings. In our Agency frame of reference, the fast adaptive reaction (nervous control) is of more vital importance than the slower humoral reaction (pituitary-adrenal axis). Since both of these pathways occur in the same individual, one of the major problems in doing research in this area has been the lack of knowledge of techniques allowing one to distinguish between the various types of observed phenomena. Progress made in this subproject on particular stressor agents and their relationships to know/humoral agents for the first time permits the experimenter to make this distinction on a rational basis. As indicated in the attached proposal, this advantage will be pursued during the coming year with the following goals in mind:

- (1) Development of materials & techniques for the production of maximum levels of physical and emotional stress in human beings.
- (2) Development of materials and techniques which produce a maximum attenuation of stress in human beings once it has been produced.
- (3) Development of new and more reproducible indicators of stress than those now in use in the Agency. The emphasis in this will be on those indicators which can be measured indirectly.
- (4) Elucidation of the significant properties of the negative phase of stress in order that psychological techniques may be worked out in other projects to exploit this phase of the human reaction to potent emotional stress.

Downgraded to: ~~CONFIDENTIAL~~
by authority of: 137475
date: June 1977

E2 IMPDET; CL BY 187475

45-95
Downgraded to: **CONFIDENTIAL**
by authority of: 187475
date: June 1977

E2 IMPDET: CL BY 187475

2. [REDACTED] also serves as a general consultant to the Agency, provides services of a sensitive nature on an ad hoc basis, and serves as a cut-out in procurement problems.

3. The total cost of this project for a period of one year will not exceed \$71,500. Charges should be made against Allotment 9-2502-75-902.

4. [REDACTED] has been requested to submit a summary accounting or a copy of the Fund's annual audit report for the sponsor's inspection. Also, it has been requested that any unexpended funds shall be returned to the Agency.

5. Title to any permanent equipment purchased by funds granted [REDACTED] shall be retained by the [REDACTED] in lieu of higher overhead rates.

6. It was mutually agreed that documentation and accounting for travel expenses which are normally reimbursable by the [REDACTED] shall conform with the accepted practices of the Fund.

7. [REDACTED] agreed to comply with the requirements of the Memorandum of Agreement.

[REDACTED] A
Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS

[REDACTED] A
Research Director

Date: Feb. 4 - 1977

Attachment:
Proposal
Original only

Downgraded to: **CONFIDENTIAL**
by authority of: 187475
date: June 1977

E2 IMPDET: CL BY 187475

NOTICE

SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

RESEARCH PROPOSAL
1959 - 1960

45-93

The research to be undertaken during the next 12 months for which financial support is hereby requested will be devoted to the analysis of the hypothalamic and endocrine mechanism of stress and chemical agents that modify it. The investigations proposed are a direct continuation and outgrowth of those supported in the previous year.

The screening procedures to be used have been markedly widened in scope to embrace a consideration of both the metabolic and enzymatic effects of stress or of the chemical agents studied.

A novel screening procedure which depends upon the survival time of animals maintained without food or water has been devised and has already been put to practical use in demonstrating the role of the hypothalamus in survival. In addition to this over-all survival screening technic, screening technics have been devised for investigating separately the role of water and fat metabolism in stress.

It is proposed to continue work on the negative phase of stress which we have previously delineated by study of the egg white response in rats. (See research report for 1957 - 1958.)

As an outgrowth of experiments performed in 1958 it is now possible to evaluate therapeutic agents at the enzymatic level. See research report enclosed. This technic of using a battery of enzyme systems in vitro as a method of evaluating the biological effectiveness of newly synthesized organic compounds opens up a whole new line of investigation and is the most rapid method of evaluation that has been devised to date and probably the most basic. It is proposed that we exploit this new approach to our utmost in the next twelve months.

45-95
The chemical synthesis of possibly active compounds will be continued at the [REDACTED] and the [REDACTED] and these chemical agents will be screened for their capacity to provoke stress or to suppress the stress reaction in its acute or chronic phases. The tests employed on animals will be used for screening and proper toxicity studies of the compounds will be carried out as heretofore.

WARNING NOTICE
SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

RESEARCH PROPOSAL
1959 - 1960

PHARMACOLOGY AND TOXICOLOGY

Pharmacologist and technician	\$12,000.00	
 toxicology	10,000.00	
Animal caretaker, animals and animal maintenance	<u>12,000.00</u>	\$34,000.00

CLINICAL SCREENING

Clinical assistants	10,000.00	
Clarical help and supplies	<u>5,000.00</u>	15,000.00

CHEMICAL SYNTHESIS

 , consultant	1,500.00	
 	5,000.00	
 	12,000.00	
Chemical supplies	<u>4,000.00</u>	<u>22,500.00</u>
TOTAL		\$ 71,500.00

WARNING NOTICE
FIVE INTELLIGENCE
AND METHODS INVOLVED

96-54

RECEIPT

Acknowledged herewith receipt of the following check:

Cashier's Check No. [REDACTED], dated September 30, 1958, ^C
in the amount of \$21,733.34, drawn on [REDACTED] ^B
payable to [REDACTED]

Date:

6 Oct 58

45-97

HBO

S-3503-N-101

46

28 JAN
1958

Authorizations #6

65,200.10

65,210.11

30 JAN
1958

Invoice #10

31,733.33

13,446.17

24 APR
1958

Invoice #11

31,733.33

31,733.33

24 SEP
1958

Invoice #12

31,733.33

24 SEP
1958Lig
8

SECRET

22 September 1956

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TBS/Budget Officer

SUBJECT : MULLER, Subproject 45, Invoice No. 12,
Allotment C-2502-10-001

1. Invoice No. 12 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$21,733.34,
drawn on a ~~check~~ ^E

The check should be made payable to the ~~treasury~~ ^B

2. Please forward the check to Chief, TBS/Chemical Division,
through TBS/Budget Officer, no later than Monday, 6 October 1956.

3. This invoice represents the total amount currently author-
ized under Subproject 45. However, since it is anticipated that ad-
ditional funds will be obligated for this project, the files should
not be closed.

~~Chief~~ ^A
Chief
TBS/Chemical Division

Attachments:
Invoice and Certifications

CHECK ^H ~~RECEIVED~~ THE AMOUNT OF \$21,733.34

Distribution:
Orig & 2 - Addressee

~~RECEIVED~~ ^A

~~RECEIVED~~ ^H 21,733.34

21,733.34

RECEIVED

SECRET

INVOICE

For services

\$21,733.34

~~CONFIDENTIAL~~ B
~~CONFIDENTIAL~~

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 12 applying to Subproject 45 of MEULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipt is on file in TSS/MS, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MEULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

10

100

RECEIPT

Acknowledged herewith receipt of the following check:

MasterCard Check No. 71601, dated April 30, 1958, in the amount of \$21,733.33, drawn on [REDACTED] payable to the [REDACTED]

- E -
- B -

[REDACTED]

Date: 6 May 58

SEC

45-100

22 April 1958

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MHLTPA, Subproject 45, Invoice No. 11,
Allotment 8-2502-10-001

1. Invoice No. 11 covering the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$21,733.33,
drawn on a ~~bank~~ bank.

The check should be made payable to the ~~United States Government~~ ^F ~~United States Government~~ B

2. Please forward the check to Chief, TSS/Chemical Division,
through TSS/Budget Officer, no later than Wednesday, 7 May 1958.

3. This invoice represents the total amount currently
authorized under Subproject 45. However, since it is anticipated
that additional funds will be obligated for this project, the
files should not be closed.

~~Chief~~
TSS/Chemical Division

Attachments:
Invoice and Certifications

DISTRIBUTION:
Orig & 2 - Addressee
✓ 1 - TSS/FASB
2 - TSS/CD

I CERTIFY THAT THE
OBLIGATION REFERENCE NO. 145D
CHARGE TO ALLOTMENT NO. F-2502-10-001

AUTHORIZING OFFICER

CHECK # ~~2466~~ IN THE AMOUNT OF \$ 21,733.33
RECEIVED. 5 1958

SECRET

INVOICE

For services

\$21,735.33

[REDACTED]

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 11 applying to Subproject 45 of MUMURA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MUMURA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

SECRET

45-101
SECRET

21 January 1958

MEMORANDUM FOR: COMPTROLLER

ATTENTION : Finance Division

SUBJECT : ~~SECRET~~, Subproject 45, Additional
Authorization No. 6

Under the authority granted in the memorandum dated
13 April 1953, from the DCI to the DS/A and the extension of this
authority in subsequent memoranda, Subproject 45 was previously
approved. Under the same authority an additional sum of \$65,000.00
has been authorized to cover the subproject's expenses (thereby
bringing to a total of \$65,000.00 funds obligated during FY 58),
to be charged to Allotment 8-2502-10-001.

~~SECRET~~ - A
Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS

~~SECRET~~ - A
Research Director
21 JAN 1958

Date: _____

Distribution:

Orig & 2 - Addressees

- 1 - TSS/OC
- 1 - TSS/FASB
- 1 - TSS/CD

TSS/CD: ~~SECRET~~ (21 January 1958)

I CERTIFY THAT FUNDS ARE AVAILABLE
OBLIGATION FUND NO. 1450
CHARGE TO ALLOTMENT 8-2502-10-001

ADMINISTRATIVE CLERK

RECEIPT

Acknowledged herewith receipt of the following check:

Check No. [REDACTED], dated February 7, 1958, in the amount of \$21,733.33 drawn on the [REDACTED] payable to the [REDACTED] -E
-B

Date: 20 Feb 58 -C

45-103

RECEIVED
JAN 21 1958

28 January 1958

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MINUTEMAN Subproject 45, Invoice No. 10
~~MINUTEMAN Subproject 45, Invoice No. 10~~

1. Invoice No. 10 for the above subproject is attached.
Payment should be made as follows:

Cashier's check in the amount of \$21,733.33,
drawn on a ~~Bank~~ bank.

The check should be made payable to the ~~Minuteman Subproject 45~~ **B**

2. Please forward the check to Chief, TSS/Chemical
Division through TSS/Budget Officer by Tuesday, 4 February 1958.
Other invoices will follow.

~~Chief~~ **A**
TSS/Chemical Division

Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee

CHECK # ~~11987~~ **11987** THE AMOUNT OF \$ 21,733.33
RECEIVED.

~~14 JAN 21 1958~~ **14 JAN 21 1958** **A**

U. 889 001450 6001 2502-10-001 171 21,733.33

Ch. Cash CERTIFIED FOR PAYMENT OF CREDIT 21,733.33

A ~~RECEIVED~~

AUTHORIZED CERTIFYING OFFICER

4 JAN

00733

45-103
SECRET

INVOICE

For services

\$21,733.33

CERTIFICATION

(1) It is hereby certified that this is Invoice No. 10 applying to Subproject No. 45 of MUNITA, that performance has been satisfactory, that the services have been accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject No. 45 of MUNITA which was duly approved, and that the project has been carried out in accordance with the memorandum dated 13 April 1953 from the DII to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

Downgraded to: CONFIDENTIAL
by: [redacted] 18775
Date: June 1971

45-104

E2 IMPDET; CL BY 187475

DRAFT/

A

21 January 1958

MEMORANDUM FOR: THE RECORD

SUBJECT : Continuation of MKULTRA, Subproject No. 45

- B
1. The scope of this subproject includes all those activities now engaged in by [redacted] under the direction of TSS/CD with the exception of those cutout functions specifically mentioned in connection with other MKULTRA subprojects. In general, the research effort under this subproject will continue along the lines laid down in previous years. These involve the synthesis and pharmacological and clinical evaluation of compounds of those chemical families known to have application in the psychochemical and "K" fields. Clinical work in the "natural toxic psychoses" carried out last year indicates that, in general, the useful (reversible) phases of such psychoses are related to the presence of various chemical stressor materials in the circulation. These materials arise from faulty metabolic processes occasioned by the particular disease in question. Materials synthesized in the project are capable of reproducing the various clinical syndromes that are observed in the natural disease.
 2. Knowledge of the nature of the important stressor compounds indicated above has allowed the design of an animal test which indicates relative potency, mode of action, etc., of these materials without the necessity of expensive and hazardous clinical testing in this area. During the coming year as indicated in the attached proposal from [redacted], a limited program of synthetic work and the attendant testing and screening will be carried out; but the major effort will be related to studies directly concerned with the production and control of the stress reaction in human beings. In line with the requested reduction of effort in biochemical research in TSS/CD, the funding of this project during the coming year has been reduced some 34% over last year.
 - OK C 3. [redacted] also serves as a general consultant to the Agency, provides services of a sensitive nature on an ad hoc basis, and serves as a cut-out in procurement problems.

4. The total cost of this project for a period of one year will not exceed \$67,200-00. Charges should be made against Allotment

6-2502-10-001.

9-2502-75-922

Downgraded to: CONFIDENTIAL
by: [redacted] 18775
Date: [redacted]

E2 IMPDET; CL BY 187475

Downgraded to: CONFIDENTIAL
by authority of: 1974
date: June 1977
E2 IMPDET; CL BY 187475

45-104
DRAFT/ A

C 5. [REDACTED] has been requested to submit a summary accounting or a copy of the Fund's annual audit report for the sponsor's inspection. Also, it has been requested that any unexpended funds shall be returned to the Agency.

B 6. Title to any permanent equipment purchased by funds granted [REDACTED] shall be retained by [REDACTED] B
[REDACTED] in lieu of higher overhead rates.

B 7. It was mutually agreed that documentation and accounting for travel expenses which are normally reimbursable by [REDACTED] B
[REDACTED] shall conform with the accepted practices of the Fund.

C 8. [REDACTED] agreed to comply with the requirements of the Memorandum of Agreement.

[REDACTED] A
Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS:

[REDACTED] A
Research Director

Date: [REDACTED] 27-1958.

Attachment:
Proposal

Original only

Downgraded to: CONFIDENTIAL
by authority of: 1974
date: Jan 1977

E2 IMPDET; CL BY 187475

RESEARCH PROPOSAL
 1958 - 1959

The research to be undertaken during the 12 months period for which financial support is requested will be devoted to an analysis of the neural and endocrine mechanism of stress and the chemical agents that influence it. The screening procedures are based largely upon the analysis of the General Adaptation Syndrome that has been worked out in rats during the past year, an outline of which is appended.

The chemical synthesis of possibly active compounds will be continued at the [REDACTED] and the [REDACTED] and these chemical agents will be screened for their capacity to provoke stress or to suppress the stress reaction in its acute or chronic phases. The tests employed on animals will be used for screening and proper toxicity studies of the compounds will be carried out as heretofore.

Chemical agents that have been found active and within a suitable toxicity range will be subjected to clinical screening on appropriate patients, the initial screening being carried out as heretofore on advanced cancer patients. The amount of money devoted to chemical synthesis will be much reduced and chemical compounds available from various sources as well as those synthesized in the project will be screened.

As heretofore any agents which prove of interest in cancer will be subjected to further evaluation both on transplanted animal tumors and on cancer patients. This cancer phase of the project

will be considered a by-product of the major objective, which
will be directed to the problem of stress.

WARNING NOTICE
SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

PROPOSED BUDGET
1958 - 1959

1 - PHARMACOLOGY AND TOXICOLOGY

Pharmacologist and technician	\$ 12,000.00	
[REDACTED], toxicology	8,000.00	
[REDACTED] - Special screening procedures	1,200.00	
Animal caretaker, animals and animal maintenance	<u>12,000.00</u>	\$ 33,200.00

2 - CLINICAL SCREENING

Clinical assistants	9,500.00	
Clerical help and supplies	<u>5,000.00</u>	14,500.00

3 - CHEMICAL SYNTHESIS

[REDACTED] consultant	1,500.00	
[REDACTED]	5,000.00	
[REDACTED]	7,000.00	
Chemical Supplies	<u>4,000.00</u>	<u>17,500.00</u>

TOTAL		\$ 65,200.00
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WARNING NOTICE
SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

45-105

Sub-45-

RECEIPT

Acknowledged herewith receipt of the following check:

Official check No. 020408, dated October 28, 1957, in the amount of \$33,333.33 drawn on the  payable to 

E B

E

C

Date: 30 Oct 57

1515

7-2502-10-001

* 15

[illegible]

755

1

~~SECRET~~

TSS/Budget Officer

1. MKULTRA Subproject 45, Invoice No. 9
Allotment 7-2502-10-001

F Cashier's check in the amount of \$33,333.33, drawn on a ~~XXXXXX~~ bank.

3

B

A
MAR 15 1965

[REDACTED]

FILED 6 20 68

RAE... 33.33

[REDACTED]

-A

29 Oct 57

12/2/57 - A
AUTHOR _____ OFFICER

AUTHOR: [REDACTED] OFFICER: [REDACTED]

~~SECRET~~
INVOICE

For services

\$33,333.33

[REDACTED]

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 9 applying to Subproject No. 45 of MKULTRA, that performance has been satisfactory, that the services have been accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Acting Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project has been carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

WA

RECEIPT

Acknowledged herewith receipt of the following check:

Official check No. 209-288152, dated May 14, 1957, in the
amount of \$33,333.33, drawn on the [REDACTED]
[REDACTED] payable to [REDACTED]

Date:

May '57

801-4

SECRET
45-109
TSS
3 May 1957

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA: TSS/Budget Officer

SUBJECT: MKULTRA Subproject 45, Invoice No. 8
Allotment 7-2502-10-001

1. Invoice No. 8 for the above subproject is attached. Payment should be made as follows:

E Cashier's check in the amount of \$33,333.33, drawn on a [redacted] bank.

B The check should be made payable to [redacted] B

2. Please forward the check to Chief, TSS/Chemical Division through TSS/Budget Officer by Friday, 17 May 1957. Other invoices will follow.

SIDNEY GOTTLIEB
Chief, TSS/Chemical Division

Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee
1 - Comptroller

E
CHECK # [redacted] IN THE AMOUNT OF \$33,333.33
RECEIVED 17 MAY 1957

At. 600.1- 887-2502-10-001-17.9- & 33,333.33
Cl. 9-1- & 33,333.33

1021
CERTIFIED FOR PAYMENT OR CREDIT
10/5/57
AUTHORIZED SIGNATURE OFFICER
A

RECEIVED

5-2630

45-109

INVOICE

For services

\$23,253.33

[REDACTED]

[REDACTED]

B

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 8 applying to Subproject 45 of MKULTRA, that performance has been satisfactory, that the services have been accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

A Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project has been carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

M

45-110

RECEIPT

Receipt is hereby acknowledged of the following check:

Cashier's check No. 400840, dated February 12, 1957,
drawn on [REDACTED] E
in the amount of \$33,333.34, payable to [REDACTED] B

B [REDACTED]
Date: 2-26-57

RECEIPT

Receipt is hereby acknowledged of the following check:

Cashier's check No. 400840, dated February 12, 1957,
drawn on [REDACTED] E
in the amount of \$33,333.34, payable to [REDACTED] B

B [REDACTED]
Date: 2-26-57

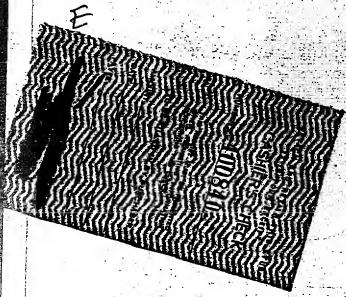
RECEIPT

Receipt is hereby acknowledged of the following check:

Cashier's check No. 400840, dated February 12, 1957,
drawn on [REDACTED]
in the amount of \$33,333.34, payable to [REDACTED] ^E_B

Date:

Given to [REDACTED] ^A
[REDACTED] 25 February 1957
^A



75-111
25 January 1957

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA: TSS/Budget Officer

SUBJECT: MEKULTRA Subproject 45, Invoice No. 7
Allotment 7-T502-10-001

1. Invoice No. 7 for the above subproject is attached. Payment should be made as follows:

E Cashier's check in the amount of \$33,333.34, drawn on a [redacted] bank.

B The check should be made payable to the [redacted]

2. Please forward the check to Chief, TSS/Chemical Division through TSS/Budget Officer by Friday, 8 February 1957. Other invoices will follow.

SIDNEY GOTTLIEB
Chief
TSS/Chemical Division

Attachments:
Invoice & Certifications

CHECK # 200590 THE AMOUNT OF \$33,333.34
RECEIVED

Distribution:
Orig & 2 - Addressee
1 - Comptroller

25 FEB 1957
[redacted] A
Dl. 600.1-887-2502-10-001-17.1-83333.34
Cl. Cash B 33333.34

CERTIFIED FOR PAYMENT OR CREDIT

1/29/57
AUTHORIZING OFFICER
[redacted] A
5-1200

2

SECRET

INVOICE

For services

\$33,333.34

[REDACTED] B

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 7 applying to Subproject 45 of MKULTRA, that performance has been satisfactory, that the services have been accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project has been carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

[REDACTED]

17 January 1957

MEMORANDUM FOR: COMPTROLLER

ATTENTION: Finance Division

**SUBJECT: MKULTRA, Subproject #3, Additional
Authorization No. 3**

Under the authority granted in the memorandum dated
13 April 1953, from the DCI to the DD/A and the extension of this
authority in subsequent memoranda, Subproject 45 was previously
approved. Under the same authority an additional sum of \$100,000.00^{71,500.00}
has been authorized to cover the subproject's expenses (thereby
bringing to a total of \$100,000.00 funds obligated during FY 57),
to be charged to Allotment 7-2502-10-001.

SIDNEY GOTTLIEB
Chief
TSS/Chemical Division

**APPROVED FOR OBLIGATION
OF FUNDS:**

Research Director

Date:

Distribution:

Orig & 2 - Addressee

1 - TSS/OC 1 - TSS/SRB
1 - TSS/FASB 2 - TSS/CD

TSS/CD: (17 January 1957)

A

M.R. 1515

45-113
DRAFT
17 January 1957

MEMORANDUM FOR: THE RECORD

SUBJECT: Project MKULTRA, Subproject 45

1. The scope of this subproject includes all those activities now engaged in by the [redacted] under the direction of TSS/CD with the exception of those cutout functions specifically mentioned in connection with other MKULTRA subprojects. In general, the research effort under this subproject will continue along the lines laid down in previous years. These involve the synthesis and pharmacological and clinical evaluation of compounds of those chemical families known to have application in the psychochemical and "K" fields. Also, last year, research in the field of so-called "natural toxic psychoses" was undertaken and will be continued during the coming year. B

2. The attached proposal from [redacted] because of its unclassified status, is couched in therapeutic terms; therefore, a certain amount of translation of its substance is warranted. Very briefly, the study on "toxic psychoses" has permitted the possible sources of reversible psychotic and/or comatose conditions to be narrowed down to a workable maximum number about which critical experiments can be designed to test various hypothetical chemical mediators. The chemical synthetic and screening program (some 100 new compounds during the year) has turned up three compounds of different families which are of fundamental importance with relation to the goals of this project. These three compounds include an orally active material which reduces blood glucose; another which acts by all routes, including percutaneous, and which appears to be the chemical mediator of "stress", and finally, a compound which is also orally active and which is a very potent new type of barbiturate and possibly alcohol antidote. It is now proposed to reduce the volume of the synthetic chemical effort in order to work out the pharmacological and clinical aspects of these and closely related substances. C

3. [redacted] also serves as a general consultant to the Agency, provides services of a sensitive nature on an ad hoc basis, and serves as a cut-out in procurement problems. C

4. The total cost of this project for a period of one year will not exceed \$100,000.00. Charges should be made against Allotment 7-2502-10-001. 65, 100.00

66-10171-100

by authority

date: June 1957

E2 IMEDS

- 2 -

5. [redacted] has been requested to submit a summary C accounting or a copy of the [redacted] annual audit report be made avail- B able for the sponsor's inspection. Also, it has been requested that any unexpended funds shall be returned to the Agency.

6. Title to any permanent equipment purchased by funds granted [redacted] shall be retained by the [redacted] B [redacted] in lieu of higher overhead rates.

7. It was mutually agreed that documentation and accounting for travel expenses which are normally reimbursable by [redacted] B [redacted] shall conform with the accepted practices of the Fund.

8. [redacted] agreed to comply with the requirements of the Memorandum of Agreement. C

[redacted] A
Chief, Branch II
TSS/Chemical Division

APPROVED FOR OBLIGATION
OF FUNDS:

APPROVED:

[redacted] A
Research Director

[redacted]
Chief, TSS/Chemical Division

Date: 23 Jan 1957.

Attachment:
Proposal

Original only

by authority of: 127475
date: June 1957

E2 IMEDS

45-15

PROPOSED RESEARCH PROGRAM

Four lines of investigation are proposed for the year 1957-58. The first line of investigation is the continuation of the toxic psychic states as illustrated by uremia, which was begun under the last grant. In the present proposal it is planned to study various phases of the uremic state along two major lines. One of these is the biochemical and pathological investigation of patients admitted to [REDACTED] B

[REDACTED] The other line of investigation will be pursued on experimental animals. Kidneys have either been removed or have been rendered nonfunctional by the ligation of the ureters. The major aspects of these two investigations are discussed in the appended report.

The second investigation proposed has to do with the investigation of novel glucose metabolic blocking agents. We are currently investigating a series of diglycolate derivatives which we have shown to block glucose metabolism with resulting storage of glycogen in the various organs, liver and kidney. The details of this are also appended.

The third proposal has to do with the study of some cyclic diamino compounds which we have shown produce the stress of phenomemon and associated rheumatoid states. The details of this proposal are also appended.

The fourth proposal concerns the continuation of chemical synthesis of a variety of piperazine compounds which will be linked with sarcosine. This report is also appended.

A similar line of chemical synthesis is also being carried out on nitrogen-containing bis phenols. These two parallel lines of chemical synthesis are a continuation of the investigations of [REDACTED] C

W [REDACTED] [REDACTED]

I - WORK ON TOXIC PSYCHOSES

Investigations that have been just completed on 138 autopsies of patients that died in uremia have shown that there are three aspects of uremic poisoning as demonstrated by correlation of the pathologic changes in the heart with the blood chemistry prior to death. In one group of cases the toxic effects are caused by acidosis and these effects are not dependent upon the level of the nonprotein nitrogen or potassium levels in the blood. In a second group of patients with elevated serum potassium definite focal damage with death of myocardial tissue is found in the heart and these patients died of potassium poisoning. In the third group of patients, who presumably died of the accumulation of toxic nitrogenous substances in the blood or related compounds, the cardiac damage is associated with unusually high nonprotein nitrogen levels in the blood and the heart shows a definite inflammatory reaction with the appearance of Anitschkow's cells. We have reason to believe from the histologic study of the pathologic changes that these toxic nitrogenous compounds are diamino derivatives of aromatic nuclei.

The work on uremic toxic states is being pursued by the analysis of the cerebral spinal fluid of patients with uremia, and by the production of uremia in experimental animals by three methods: (a) Nephrectomy; (b) ligation of the ureters; (c) poisoning of the kidneys with derivatives of naphthalic anhydride.

Since it has now been demonstrated that there are at least three components to the uremic state (1) acidosis which changes the blood pH, (2) elevated potassium levels, and (3) elevated nonprotein nitrogen levels, it is possible to go back in the histories of these patients and correlate the depth of uremic coma and its duration with the dominant component in the blood changes in each individual case whether it be potassium, pH or nitrogenous.

~~TOP SECRET~~
~~CONFIDENTIAL~~
~~CONFIDENTIAL~~

45-102
1-2

On the living patients it is possible by placing them on the artificial kidney and by adjusting the fluid bath which controls the dialysis, to differentially modify each of these three components in individual cases and to determine its effect on comatose states in patients. It is also possible to check this with spinal fluid determinations.

In the experiments that have been set up on animals we have living for periods of two to four days uremic rats and rabbits whose kidneys have been removed or whose kidneys are non-excreting because of ligation of the ureters. In the initial experiment on these animals we have been interested in simple fluid redistribution in the uremic state. It has been known for some time that patients dying of uremia may show increased fluid accumulation in any or all of the serous cavities. In other words, they show an accumulated transudate in the peritoneal cavity, in the pericardial cavity, in the pleural cavity or in the meningeal cavity of the subarachnoid space. In the control animals and in many patients, death from uremia occurs before this change in fluid distribution has occurred. In our experiments, by giving cortisone we can markedly increase the transudating fluid in all of these cavities and therefore produce at will cerebral edema along with increased fluid in the other serous cavities while the animal is still alive. This change in the distribution of fluid is important since in all the textbooks on uremia prior to recent potassium studies, the uremic state as exemplified by psychoses and coma, was thought to be due to cerebral edema or simple wet brain. One of the most striking bits of ignorance that were confronted in these studies is the fact that although it has been known for hundreds of years that there is such redistribution of fluid in the serous cavities, no one has ever raised the question whether it is due to increased rate of effusion or delayed rate of absorption, or both.

It is becoming increasingly evident in the study of abnormal fluid distribution in the body that there are two major controlling factors. One of these is the chemical

WARNING NOTICE

constitution of the fluid to be exchanged which may alter diffusion constants by its ionic or osmotic components, or alter the diffusion rate by containing constituents which damage or otherwise alter the diffusion membrane. The second factor is the biological composition of the diffusion membrane with its living structure and collagenous matrix. In the past several hundred years the tanning industry has been working with the biochemical properties of collagen since leather is 90 to 95% collagen. The workers in this industry have accumulated a large amount of information on two different agents. Those that wet or render more pliable collagen matrix and therefore make it more porous, and those that harden or toughen the collagen matrix and therefore render it less permeable. The first class of agents is termed lyotropic and its classical member is dilute acetic acid. The other group of agents is called tannin and the classical agent is tannic acid or the pyrogalllic acids. This group of agents can be applied to the diffusion membranes to alter their reaction. Since many of the induced cerebral states can be attributed directly to hydration or dehydration of the cerebral substance, this investigation of the diffusion rates into and out of the serous cavities of the meninges offers a fundamental approach to study of one aspect of cerebral function.

II - INVESTIGATION OF GLUCOSE METABOLISM AND ITS RELATION TO MENTAL FUNCTION AND CANCER THERAPY

It is well known that the brain in its metabolic function relies heavily on glucose and oxygen. The importance of the relation of glucose to cerebral function was first emphasized by the introduction of insulin shock therapy into the treatment of schizophrenia. This form of shock therapy was subsequently replaced by electric shock, but recently ^C [REDACTED] of [REDACTED] ^B [REDACTED] has shown that in diabetes the psychotic state can be induced by low blood sugar in the brain from sensitivity to insulin and can be reversed to normal by the intravenous administration of glucose. The author has been interested in substituting orally active and nontoxic chemical compounds as a substitute for insulin with the hope that more simple methods can be devised for modifying cerebral metabolism. A series of alkyl and alkylamino esters of oxy-diacetic acid have been prepared which block some phase of the Krebs's cycle of glucose metabolism. The exact point of blockage remains to be determined. The phenomena of blockage by these compounds, however, have been demonstrated in animals by showing that they produce glycogen storage in the liver, heart, and kidneys by preventing the conversion of glycogen to glucose. For the first time it has been possible to produce experimentally von Gierke's disease, which is characterized by glycogen storage in the above-mentioned organs.

The phenomenon of glycogen storage was first produced by both the dimethyl and diethyl derivatives of the diglycolate compounds. The initial experiments consisted of giving groups of six rats each doses of 5, 10, and 25 mg. per rat daily for periods of 6 weeks to 2 months. The glycogen storage was most marked early in the course of the administration, as demonstrated by sacrificing some rats at the end of 2 to 4 days. The experiments were subsequently modified to include rabbits, so that the blood and urine studies could be more easily made. It was shown in rabbits that the compounds initially

UNCLASSIFIED
DATE 11-11-01 BY 60322 UCBAW

produced glycosuria, which disappeared in 48 hours. The fasting blood sugar of the animals is lowered; no acetone bodies appear in the urine.

In the next experiment the compounds were administered orally, intramuscularly or intravenously to cancer patients and were found effective in controlling for a period of 3 months (to-date) diseases in the lymphoma and leukemic class. These patients have been able to tolerate the compound, and although it initially produced lowering of the blood sugar, if the dose is not increased, there is acquired tolerance to the hypoglycemic effect of the drug.

In the next experiment, the drug was administered to four diabetic patients. The blood sugar can be reduced in fresh diabetics not previously subjected to insulin from a level of 350 mg% to 250 mg% by the administration of 250 mg. of the compound. Diethyl is more potent than dimethyl derivatives. In other diabetics the blood sugar levels can be satisfactorily controlled for a period of 3 to 4 weeks on small doses but after that time tolerance develops, and the dosage must be raised. The compound lowers blood sugar by glycogen storage, but does not increase the capacity to burn sugar. Insulin must therefore be added.

In another group of experiments about to be undertaken, it is planned to administer these drugs to hospitalized diabetics and study the effect on mental function of large doses of the compound.

Several of the cancer patients on the compound have complained of mental fogging, which is accompanied by complete relief from pain on high dosage. This mental fogging, of course, is not experienced by diabetics and must be a function of the glucose level in the brain.

It is planned to synthesize a group of allied compounds and to broaden this line of investigation. It is also planned to utilize a Warburg apparatus and electrophoresis in order to elucidate the exact phase of glucose metabolism that is inhibited by these compounds.

III

[REDACTED] * C

by

[REDACTED] C

and

[REDACTED] C

Prolongation of the Inflammatory Process by Immune Responses. When

bacteria or similar injurious substances gain access to living tissues the local capillary bed responds and permits the escape of fluid and leucocytes into the zone of injury. Most of the extravasated fluid returns to the circulation by the lymphatics because the inflammatory edema compresses capillaries and venules but distends the lymphatics, which are anchored by numerous septa to the interstitial fluid compartment.

The modified interstitial fluid from the injured area which returns via lymphatics traverses lymphoid tissue in the lymph nodes. The lymphoid tissue, within 3 to 7 days, responds by liberating antibodies which enter the circulation and return to the injured site where they serve to neutralize the injurious agent by uniting antibody with antigenic substances.

It is customary to describe the immune response which follows the inflammatory reaction to local injury as a co-defensive mechanism, which is highly specific and nearly 100 per cent efficient in its end results. A study of the allergic diseases such as hay fever, asthma, urticaria and eczema and the occurrence of such dramatic reactions as fatal anaphylaxis or extensive necrosis in the Arthus's phenomenon indicates that antibody-antigen reaction is not as accurate and efficient as immunologists lead us to believe.

* Supported by Grant [REDACTED]

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Moreover, the modern tendency to class the diffuse collagen diseases, such as acute rheumatic fever, rheumatoid arthritis, disseminated lupus erythematosus, polyarteritis, capillary platelet thrombosis, and scleroderma, as modified forms of Arthus's phenomenon indicates that there are additional characteristics or functions of the antigen-antibody reaction that have not yet been elucidated. For a number of years the author has been convinced that one of the functions of the antigen-antibody reaction is to prolong the inflammatory process by liberating irritating amines, which for want of a better term have been described in the literature as "union bodies." It appears that Nature's oldest and most reliable means to combat injury and infection is the inflammatory process, and although the immune process is more modern and efficient, it nonetheless is still mistrusted and provision is made for antigen-antibody union to prolong inflammation under special circumstances. The fact that the combination of antigen and antibody union can itself initiate an inflammatory response is only too well demonstrated in cases of eczema, urticaria and hay fever. It is only with the greatest attention to details that an incipient case of hay fever can be differentiated from a common cold.

Experimentation with several irritating amines has finally permitted the characterization of a substance, which we have termed "alarmine," which we believe is an essential part of antigen-antibody reactions. The liberation of such an amine substance during the antigen-antibody reaction has three separate functions: 1. The irritant amine or alarmines prolongs the local inflammatory reaction. This it does by alteration of the capillary wall of the affected locality in a more marked fashion than histamine or "H" substance. 2. It triggers the general adaptation syndrome in the adrenals, releasing cortisone, which increases the amount of immune globulin liberated through the break-up of lymphoid tissue. If repetitive injury does not occur, the

tendency for alarmine to further prolong the inflammatory reaction is inhibited by adrenal cortical hormones, which reaches the inflamed tissues via the circulation. This cortisone neutralizes the local alarmine effect and further inflammatory response is not provoked. 3. If the amount of antigen is unusually great or if repeated exposure to the antigen occurs alarmine is not neutralized but prolongs the general adaptation syndrome and at the same time provokes an even more marked vascular change, which has been erroneously termed collagenous necrosis, but is instead a misguided form of incipient fibrous repair.

It is the purpose of the present communication to describe the actions of amine irritants of the alarmine class, and to show their role in triggering the alarm reaction in the adrenal and also their role in the production of so-called diffuse collagen disease. We have been able to produce for the first time experimentally rheumatic myocarditis with Aschoff bodies, rheumatoid arthritis with rheumatoid nodules, and a variety of vascular lesions known as diffuse collagen disease, by irritant amines of relative simple chemical structure. (Fig. 1).

Experimental Results of Painting Rats with Alarmine. In the original experiment 24 rats were painted twice daily with a 5 per cent solution of dimethyl dianiline. The solution in sesame oil was applied to a shaved area of skin on the thigh approximately 2 x 3 cm. in size. The rodents died within 36 to 72 hours. Vesicles or ulcerations of the skin appeared in all rats living more than 48 hours. The effect on the epidermis was similar to that of nitrogen-mustard, with destruction of the basal cells of the epidermis and vesiculation of nuclei. In some of these rats at autopsy the adrenals were slightly enlarged and hemorrhagic. It was, therefore, decided to undertake chronic toxicity studies and to study in detail the effect of the compound on the systemic organs, instead of restricting the study to the skin.

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From the knowledge of the formula and the effects on the skin and adrenal, it was assumed that one of two things might explain the results. The toxicity of the compound might have destroyed tissue and in this way caused adrenal hyperfunction through an alarm reaction; or the compound could be akin to that studied by Landsteiner, in which phenylamines acting as haptens combined with proteins to produce antibody reactions, thus producing an alarm reaction with first hypertrophy and then exhaustion of the adrenals through an allergic response. The results were puzzling, but interesting.

A second series of experiments were undertaken in which three groups of rats were painted daily on the surface of the shaved skin of the thigh over an area of approximately 2 x 3 cm. These were Wistar rats weighing 120 Gm.

Group I, consisting of eight rats, was painted with a 2 per cent solution in sesame oil daily except Sunday. Four untreated rats served as controls.

Group II, consisting of eight rats, was painted with a 1 per cent solution in sesame oil daily except Sunday. Four untreated rats served as controls.

Group III, consisting of eight rats, was painted with a 0.5 per cent solution in sesame oil daily except Sunday. Four untreated rats served as controls.

Group I. High Dosage. The rats died between 10 and 15 days, on the average of 12 days. They showed stationary weight. The skin showed some ulceration and vesicles, but not as severe as with the 5 per cent solution. Grossly, the adrenals did not appear to be markedly enlarged. The spleen and lymphoid tissues showed slight atrophy. The lungs showed increased secretion in the bronchi, and these rats seemed to die of pulmonary edema and congestion. The heart was dilated. Microscopically, the pulmonary edema was due to exudation of plasma (so-called lymphorrhagia) about the smaller blood vessels in the lung. The basement membrane of these smaller vessels showed smudging and dissolution and the endothelial lining cells projected into the lumen and some were detached. In the heart there was an accumulation of spindle cells between (endothelial cells liberated by dissolution of adjacent capillaries) lying between

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GROUP I, HIGH DOSAGE

the myocardial fibers, where they had been separated by edema fluid from leaking vessels similar to those found in the lungs. Some of the sections showed typical Aschoff bodies (Fig. 2 and 3). There were numerous dilated vascular spaces lined by a single layer of endothelium and many extravasated erythrocytes. In the synovial membranes of the knee joint the capillaries were dilated and filled with red cells, some of which were undergoing lysis. There was smudging of the ground substance immediately beneath the mesothelial lining layer. In the bone marrow the capillaries were similarly dilated and there were areas of coagulated extravasated fluid. The bone marrow elements were intact. The spleen showed almost complete disappearance of lymphoid pulp. The surviving germinal centers showed evidence of necrosis. Other organs were negative.

Group II. Middle Dosage. These rats lived a maximum period of 2 months, and they died between the 30th and 60th day. They showed failure to gain weight. At autopsy, grossly, the lungs were congested and showed pulmonary edema and increased secretion in the bronchi. There was some thickening of the arteries in the lungs, but not the veins. Histologically, there was some "onion peeling" of small arteries and arterioles, but some of the controls showed similar changes. The heart was dilated and the adrenals were enlarged. Microscopically, the adrenals showed hypertrophy and hyperplasia confined to the cortex. The spleen and lymphoid tissues were similar to Group I. Microscopically, the spleen showed reduction of lymphoid tissue and necrosis of the germinal centers. There was increased number of macrophages in the pulp with numerous binucleated forms. (Figure 4) and 5. The heart showed focal fibrosis with Anitschkov's cells and some Aschoff bodies, and about this there were areas of fibrinoid degeneration. The joint changes in animals that died early were similar to Group I. Other organs were negative.

Group III. Low Dosage. Some of the rats in this group died 6 weeks after the beginning of the experiments, but some were still living 3 months

later. At autopsy, the outstanding finding was endothelial proliferation of the lining of small pulmonary vessels, so that their lumen was practically occluded. Some of the vessels looked like they were being recanalized and some looked almost like glomeruli. The endothelial proliferation in places extended out into the adjacent septa of the lung. This was found in only two rats, who apparently inhaled the alkaline while licking their wounds. (Fig. 5). The spleen was practically devoid of lymphoid tissue and nearly double in size. The pulp contained many macrophages with numerous foam cell types and there were some granulocytes but practically no lymphocytes. A few germinal centers were intact. The heart showed areas of fibrinoid degeneration and typical Aschoff bodies with Anitschkow's cells. In other vessels, the walls of the capillaries were disintegrating and the liberated endothelial cells accumulated about arterioles to form typical Aschoff bodies. The adjacent myofibrils were necrotic and hyalinized. These changes were not as widespread as in the rats on higher dosage.

The knee joints on microscopic examination showed rheumatoid arthritis with the formation of rheumatoid nodules in the synovial membrane. (Fig. 6). The bone marrow was not remarkable. The brains and kidneys were normal in appearance. In the region of the kidneys and pancreas small to medium-sized vessels showed thrombocytosis or marked endothelial proliferation similar to that found in the lungs. (Fig. 7).

The skin showed epidermal hyperplasia in the painted areas. In the subcutaneous tissue of these rats there was marked edema simulating a stage in scleroderma, except that the location was not in the derma and was unaccompanied by atrophy of the hair follicles. In the voluntary muscles beneath the painted areas there were also collections of plasma cells and lymphocytes and damage to blood vessels simulating the lesions of dermatomyositis. (Fig. 9).

In the liver there were increased numbers of cells with acidophilic

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cytoplasm and binucleated forms. Some of the vessels showed endothelial proliferation as in the lungs. There seemed to be acidophilic inclusions resembling Councilman's bodies. Some of the liver cells were vacuolated; others showed hyalin droplet degeneration, and the nuclei were of varying size and density. (Fig. 10). The control rats showed no significant changes.

Effect of Alarmines on the Cement and Ground Substances. The primary effect of alarmines is to produce hydration of the mucopolysaccharide structure of basement membranes and ground substance in mesenchymal tissues. The most sensitive tissue component is the cement substance in the endothelial wall of capillaries; perhaps because this is the site of the initial contact in the tissue. The earliest change is softening which allows the capillary wall to stretch and form aneurysmal dilatations. (Fig. 11). In the basement membrane behind the endothelium in precapillary arteries and in arterioles, this hydration can be seen histologically as a chain of small bubbles, which we have termed beading. (Fig. 12). In the next stage the capillary wall disintegrates and the viable endothelial cells and intact erythrocytes spill into the tissue spaces. (Fig. 13). In the heart the liberated endothelial cells from the coronary capillaries migrate toward damaged arterioles and form perivascular Aschoff bodies. In subsequent stages there is more widespread damage to the connective tissue components. This results in fusion of erythrocytes, condensation of ground substance to form fibrinoid degeneration and liquefaction of other portions of the ground substance probably due to its infiltration by plasma leaking from the ruptured capillaries, and shredding of the collagen fibers with subsequent necrosis of these structures and adjacent muscle cells. Depolymerization and hydrolysis affects the nonviable cement and

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ground substance and fibers of vessels and connective tissue. Alarmine decomposes these nonviable components of stromal tissue, which are technically known as mucopolysaccharides and scleroproteins. This target tissue is the identical structure damaged by vitamin C deficiency and by hyaluronidase, and it is the same structure which is strengthened and rendered more resistant to this effect by cortisone. Alarmine is, therefore, an antagonist of vitamin C and cortisone and the artificial tanning substances, such as the quinolines.

If we analyze this pathologic series of responses into its major components, we find that intense injury by alarmine is an exaggeration of the pathologic process found in the simple healing of wounds, which has been termed organization. Here the injured tissue releases minimal amounts of alarmine which produces matrix hydrolysis and capillary aneurysmal dilatation of the capillaries due to the flaccid state of their walls. Because of the chemotaxis of the capillary endothelium for the hydrated matrix in the injured area, so-called capillary sprouts are dragged into the wound. The histologic picture that results is known as granulation tissue.

The primary effect of alarmine in producing the changes of rheumatoid carditis, rheumatoid arthritis and polyarteritis is on the basement membrane of blood vessels and not primarily on the collagen fibers of connective tissue. According to the latest chemical studies of collagen, the fibrinoid degeneration where it occurs in connective tissue does not involve the collagen bundles of well-formed connective tissue fibers. In order to emphasize the exact sequence of events it is important to review the histological and biochemical composition of connective tissue.

Robb-Smith² has defined connective tissue as a continuous matrix varying in consistency from the limpidness of Wharton's jelly of the umbilical cord to the hardness of bone in which lies an interlacing fabric of fibers of different and is bathing isolated or closely set cells. This continuous matrix pervades the spaces between organs and major

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vessels and supplies the capsule for these major structures, as well as their supporting stroma. This definition does not emphasize the most important cells, the fibroblasts, which show various stages of development from the reticulum cells to the adult fibrocytes and also a parallel line of development (usually under pathologic conditions) from reticulum cells to histiocytes. The definition also does not emphasize an additional specialized component of connective tissue, the basement membrane. The matrix of connective tissue contains a variety of mucopolysaccharides, such as hyaluronic acid and chondroitin sulfate in combination with proteins. In this matrix are embedded fibers of collagen, reticulin and elastica, which are defined as precipitated scleroproteins. The elastica does not concern us here, but the reticulin and collagen fibers do. The collagen fibers are polymerized polypeptides, which are oriented in linear fashion and contain a small amount of mucopolysaccharide. The reticulin fibers are really nonoriented scleroproteins with more abundant mucopolysaccharide. They may be termed precollagenous fibrils with a less differentiated structure. The important point is that both are precipitated or formed from the matrix. The third noncellular structure, besides fibers and ground substance, is the basement membrane, which is formed from reticulin fibers and condensed matrix, which stains more intensively for mucopolysaccharides than the ground substance. This condensed matrix at the basement membrane is usually termed cementin and also forms a binding substance between the endothelial cells in the capillary wall.

Histogenesis of the Aschoff Body

In pathologic response, depolymerization of the reticulin fibers and the condensed ground substance, both of which form the basement membrane of small vessels, permits hydration of the matrix, which is hydrophilic and retains water and absorbs electrolytes. At the same time the cement substance of the capillary wall is similarly affected. The initial stage, therefore, in the

rheumatoid and collagen diseases that we are discussing is a depolymerization of cementin with leakage and hydration of the ground substance with secondary loss of collagen fibrils. In response to the hydration of the ground substance, the connective tissue cells proliferate and contribute to the Aschoff bodies (which at first contain only liberated endothelial cells from destroyed capillaries) and form rheumatoid nodules, which are so characteristic of the rheumatoid state. Since the basement membrane is the primarily affected structure and this is composed of condensed ground substance and reticulin fibers and not of the more highly differentiated collagen fibers, the term collagen disease does not describe the primary process. The fibrinoid degeneration observed is a coagulum of the ground substance and cement substance. The endothelial aggregates, which previously have been neglected, are provided by separation of the endothelial cells from altered or dissolved capillaries. Endothelial proliferation and fibrocytic proliferation both contribute to the formation of the Aschoff body and are both secondary to the freeing of these fixed cells which come to lie free in a fluid matrix, which is mostly blood plasma and partly hydrated cement substance and matrix.

Role of Adrenal in the General Adaptation Syndrome

There is good reason to believe that the general adaptation syndrome of Selye³, in which the adrenal cortex plays the dominant role, serves as a co-defensive mechanism both in local tissue damage and in the immunological responses of the reticuloendothelial system. Sayers⁴ believes that products of tissue damage following severe injury combine with cortical hormones in the peripheral tissues, and with the resultant fall in their concentration in the venous blood, this normal check on the adenohypophysis is released and the pituitary responds by increased secretion of ACTH. This resultant increase in the output of ACTH depletes the adrenal cortex of its hormones and stimulates additional hormone production.

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If the period of stress is prolonged or continued, stimulation produces cortical hyperplasia and enlargement of the adrenals. This cortical hyperfunction results in alteration of carbohydrates, protein and fat metabolism. There is also an elevation of sodium electrolytes in the serum, which increases the resistance of the animal by expanding the metabolic pool and the volume of tissue fluids. At the same time, there is increased excretion of such toxic products as potassium, histamines and uric acid. Simultaneously, the immune mechanisms are reinforced by destruction of lymphocytes resulting in lymphocytopenia, eosinopenia and leucocytosis. Since lymphocytes store immune globulins, their disintegration leads to a rapid rise in antibody titer.

If exposure to stress continues, the adaptation syndrome fails and is followed by exhaustion. Selye believed that the excessive drain on the anterior pituitary and adrenal cortical hormones incident to protracted or repeated trauma may result in cardiovascular renal and joint disease, and he lists such entities as nephrosclerosis, polyarteritis, carditis and arthritis as adaptation diseases. However, the consensus of present day opinion holds that these are forms of diffuse collagen disease resulting from hyperimmunity. Talbott and Ferrandis⁵ believe that the etiology of these conditions is still unknown and that no investigation has successfully reproduced them in animals except for polyarteritis in rabbits and the occurrence of disseminated lupus erythematosus in humans following the administration of the antihypertensive drug, hydralazine (Apresoline).

In the authors' opinion, it is now possible to demonstrate that similar irritating amines are released in tissue damage, where they have been customarily referred to as "H" substances, and in the union of antigen and antibody, where they have been termed "union substances." These irritating

amines, which we have termed alarmines, neutralise adrenal cortical hormones in the tissues and thus release ACTH and stimulate the general adaptation syndrome. They are in turn neutralized by increased excretion of adrenal cortical hormones if bodily resistance is adequate (the resistance phase of Selye).

However, if tissue damage is overwhelming the body passes rapidly through the phases of alarm and resistance to exhaustion. Such acute exhaustion is synonymous with irreversible shock or peripheral vascular failure (so-called forward cardiac failure). If overwhelming acute stress involves the immune mechanism, the high concentration of unneutralized alarmine provokes the Arthus's phenomenon with its characteristic vascular thrombosis and resultant tissue necrosis. If stress is unduly prolonged by repeated exposure to infections or similar antigens, the continued and increasing release of unneutralized alarmine exhausts the adrenals or exceeds their protective capacity (even in the presence of cortical hypertrophy), and collagen disease results.

The Stress Aspects of Alarmine

In the experiments reported above the adrenal cortical enlargement observed may be considered an indirect effect of alarmine, which neutralises cortisone in the tissues and thus stimulates the adenohypophysis, which releases ACTH to bring about the cortical hyperplasia. Another interpretation, however, is possible. The alarmine may act directly on the adrenal medulla, which in turn releases adrenalin to stimulate the adenohypophysis to secrete increased ACTH. This second interpretation is suggested by the degenerative changes in the adrenal medulla, which were observed in a further group of experiments described below. Whether either or both mechanisms apply, the fact remains the adrenals undergo enlargement (in some animals to four times their normal weight). The changes in the lymphoid tissue, particularly marked in the spleen, are the result of the adrenal cortical hyperplasia. The alarmine in any event initiates the adaptation syndrome.

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In order to demonstrate the relationship of alarmino to cortisone and to the stress phenomenon, which Selye has termed the general adaptation syndrome, a third group of experiments was performed. The rats used were males of the Wistar strain, weighing 100 gm. each, and were injected intramuscularly six days weekly for 25 days and then sacrificed. The tissues of all major organs were examined.

Group I consisted of six control rats, receiving 1/2 cc. of normal saline. No significant changes were observed in this group. One animal had murine pneumonitis, and one had some increase in the connective tissue cells between the myocardial fibers.

Group II consisted of 6 rats, receiving 0.1 cc. each of spirits of turpentine. These rats were sacrificed on the ninth day. They showed mild perivascular edema and separation of connective tissue fibers about small vessels, but none of the striking changes observed with alarmino. There was no adrenal hypertrophy.

Group III consisted of 6 rats, receiving 1 mg. daily of an amine compound in which methyl piperazine was linked with propanol to dimethyl piperazine. No significant changes were observed in these rats, when sacrificed on the 26th day.

Group IV consisted of 6 rats, receiving 2.5 mg. daily of an amine compound, in which methyl piperidine was linked with another molecule of piperidine by propanol. No significant changes were observed in these rats when sacrificed on the 26th day.

Group V consisted of 6 rats, receiving 0.1 mg. daily of alarmino. These rats were sacrificed on the 26th day. They showed changes in the lungs, heart, joints, spleen and adrenals similar to those reported above in the rats painted with 0.5 per cent solution of alarmino in sesame oil.

Group VI consisted of 6 rats, receiving 0.1 mg. of alarmino daily, plus 2.5 mg. daily of procaine HCl. These rats were sacrificed on the 26th day.

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They showed changes similar to those in Group V, but the changes were slightly more pronounced. The reason for this, in our opinion, is that the procaine inhibited pain and irritation from the alarmino in the local tissues, and thus did not provoke such a pronounced cortical response in the adrenals. In other words, there was less stress phenomenon provoked in the adrenal.

Group VII consisted of 6 rats, receiving 0.1 mg. of alarmino daily, plus 1 mg. daily of cortisone. These rats were sacrificed on the 26th day. No significant change was observed in any organ. The cortisone had completely inhibited the response to alarmino.

Conclusion

It may be concluded from the above experiments and observations that a diamino benzene derivative, which we have termed alarmino, is a relatively specific irritant amine, which is capable of hydrolysing the cement and ground substances of connective tissue and of producing the so-called collagen diseases. At the same time it provokes the general adaptation syndrome, but if given in sufficient amounts or concentration it is capable of overriding the protective response of the general adaptation syndrome, which it provokes. This irritant amine can be neutralized in its pathologic effects by the simultaneous administration of sufficient amounts of cortisone.

The collagen diseases which we believe to be reproducible with this substance are: rheumatic carditis, rheumatoid arthritis, scleroderma and dermatomyositis, and polyarteritis. In the experiments recorded above glomerulonephritis and membranous glomerulitis with wire-looping in the capillary loops of the nephron characteristic of disseminated lupus erythematosus were not observed. Since this is undoubtedly a collagen disease, an attempt to produce such changes was made in a final group of experiments. Six Wistar male rats, weighing 60 to 80 Gm., were painted daily with a 2 per cent solution of alarmino to a shaved area of the thigh 2 x 3 cm. The smaller rats were chosen in preference to raising the

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alarmine dosage. These rats died after three days and complete autopsies were performed. They showed changes in the heart and joints characteristic of early rheumatic carditis and rheumatoid arthritis, as previously described. In addition, all of the rats showed membranous glomerulonephritis, with wire-loops characteristic of disseminated lupus erythematosus. There were also vascular lesions in the brain, such as are seen in collagen diseases, and small focal accumulations of gitter cells, resembling typhus nodules, a reaction to vascular damage. The type of collagen disease observed, therefore, is dependent upon the concentration of alarmine released in the tissues.

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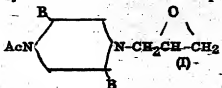
- 45-112
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- Figure 1. Formula of Alarminae
- Figure 2. Change in Vessels in Lung
- Figure 3. Aschoff Bodies in Heart
- Figure 4. Changes in Adrenal
- Figure 5. Changes in Spleen
- Figure 6. Rheumatoid Arthritis of Knee Joint
- Figure 7. Thrombocytosis of Artery in Renal Fat
- Figure 8. Subcutaneous Scleroderma
- Figure 9. Dermatomyositis
- Figure 10. Liver Changes
- Figure 11. Capillary Aneurysms
- Figure 12. Beading of the Basement Membrane
- Figure 13. Capillary Dissolution with Liberation of Endothelial Cells

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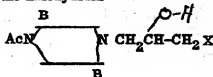
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1. Code: Ac. 7. 2

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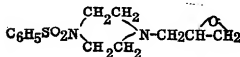
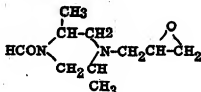
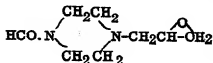


and the halohydrins



which may be used in the synthesis of I, where AC is a member of the group made up of acyl, aryl sulfonyl and alkyl sulfonyl, and B is a member chosen from the group made up of H and CH₃ and X is a member of the group made up of chloride, bromide and iodine.

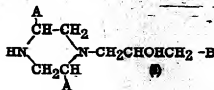
Typical compounds to be included:



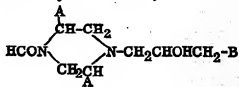
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2. Code: Ax7 Cx7

This synthetic work relates to compounds of the structure



their acid addition salts and quaternary ammonium salts,
and the formyl derivatives,



which may be used in the synthesis of I

where A is a member chosen from the group made up of H and CH₃,
and B is a monovalent amino radical which is a member taken from
the group made up of the following:

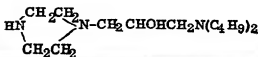
- (1) a radical of the structure RNH- where R is an alkyl radical from 1 to 4 carbons
- (2) a radical of the structure $\begin{array}{c} \text{R}' \\ | \\ \text{N} \\ | \\ \text{R}'' \end{array}$

where R' and R'' are alkyl radicals, the total carbon content of which is between 2 and 8

(3) a heterocyclic radical which is a member of the group made up of
pyrrolidino, piperidino and morpholino

- (4) 1-(1, 2, 3, 4-tetrahydroquinolino), 1-(decahydroquinolino),
1-(6-methoxy-1, 2, 3, 4-tetrahydroquinolino) and
2-(1, 2, 3, 4-tetrahydroisoquinolino).

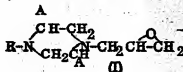
Typical compounds: $\text{CH}_3\text{NHCH}_2\text{CHOHCH}_2\text{N} \begin{array}{c} \text{CH}_2\text{CH}_2 \\ \diagup \quad \diagdown \\ \text{CH}_2\text{CH}_2 \end{array} \text{NH}$



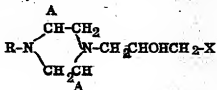
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3. Code: R. 7 2

This synthetic work relates to compounds of the structure



and the halohydrins



which may be used in the synthesis of I

where R is a member chosen from the group made up of an alkyl

radical of from 1 to 6 carbons, benzyl and benzhydryl, and

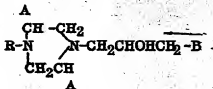
A is a member chosen from the group made up of H and CH₃ and

X is a member chosen from the group made up of chloride, bromide and iodide.

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4. Code: R. 7xC R. 7xA

This synthetic work relates to compounds of the structure



their acid addition salts and quaternary ammonium salts,

where R is a member taken from the group made up of alkyl

radicals of from 1 to 6 carbons, benzyl and benzhydryl,

where A is a member chosen from the group made up of H and CH₃

and B is monovalent amino radical which is a member taken from the group made up of the following:

(1) a radical of the structure R'NH where R' is a member chosen from the group made up of H and an alkyl radical of from 1 to 4 carbons

(2) a radical of the structure $\begin{array}{c} \text{R}'' \\ | \\ \text{N} \\ | \\ \text{R}''' \end{array}$

where R'' and R''' are alkyl radicals, the total carbon content of which is between 2 and 8 inclusive

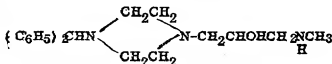
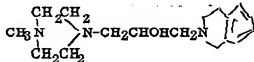
(3) a heterocyclic radical which is a member of the group made up of pyrrolidino, piperidino and morpholino

(4) 1-(1, 2, 3, 4-tetrahydroquinolino), 1-(decahydroquinolino),

1-(6-methoxy-1, 2, 3, 4-tetrahydroquinolino) and

2-(1, 2, 3, 4-tetrahydroisoquinolino).

Typical examples:



~~WARNING NOTICE~~
~~CONFIDENTIALITY NOTICE~~
~~SOURCES AND METHODS INFORMATION~~

45-113

PROPOSED BUDGET

1957 - 1958

Analysis of Body Fluids in Toxic States

Biochemists (2)	\$16,000.00	
Technicians, Laboratory (2)	6,000.00	
Special Equipment	10,000.00	
Supplies	7,000.00	
Clinical Assistant	<u>6,000.00</u>	\$ 45,000.00

Chemical Synthesis

C [REDACTED] Consultant	1,500.00	
C [REDACTED] B	4,500.00	
B [REDACTED] (chemical syntheses)	<u>20,000.00</u>	26,000.00

Toxicology and Pharmacology

Animal caretaker and animals	12,000.00	
Pharmacologist and technician	12,000.00	
C [REDACTED] Toxicology	<u>5,000.00</u>	<u>29,000.00</u>
TOTAL		\$ 190,000.00

~~WARNING NOTICE~~
~~FOR THE INTERAGENCY~~
~~SOURCES AND METHODS INVOLVED~~

RECEIPT

I hereby acknowledge receipt of the following check:

Official Check No. G 11510, dated September 17, 1956, drawn on the
[REDACTED], in the amount of \$34,000.00,
payable to [REDACTED] B

Date: 27 Sept 56

A

45-118
10 September 1956

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA: TSS/Budget Officer

SUBJECT: MKULTRA Subproject 45
Invoice No. 6, Allotment 6-2302-10-081

1. Invoice No. 6 for the above subproject is attached. Payment should be made as follows:

(E) Cashier's check in the amount of \$24,000.00, drawn on a [redacted] bank.

(B) The check should be made payable to the [redacted] (B)

2. Please forward the checks to Chief, TSS/Chemical Division through TSS/Budget Officer by Friday, 5 October 1956.

(E) 3. This is a final invoice. A total of \$133,000.00 was obligated under this subproject during FY 56. However since it is anticipated that additional funds will be obligated for this project, the files should not be closed.

(A) CHECK ~~MADE~~ IN THE AMOUNT OF \$24,000
RECEIVED 26 1956

SIDNEY GOTTLIEB
Chief
TSS/Chemical Division

(A) [redacted]
Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee
1 - Comptroller

✓ 1 - TSS/FASB
1 - 2 TSS/CD

TSS/CD: [redacted] (10 September 1956)

I CERTIFY THAT FUNDS ARE AVAILABLE;
OBLIGATION REFERENCE NO. 453

CHARGE TO ALLIANCE NO. 6-2302-10-081

AUTHORIZING OFFICER (A)

071
255 13 2 58 PM '56

INVOICE

For services

\$34,000.00

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 6 applying to Subproject 45 of MKULTRA, that performance is satisfactory, that the services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

95-116

RECEIPT

FILE SUB PROJECT
45?

I hereby acknowledge receipt of
Official Check # MN240957 in the amount of \$33,000.00,
payable to the

(E) (B)

[REDACTED]

(C)

Date

6 June 1976

45-118

5 June 1956

MEMORANDUM FOR: THE CONTROLLER

ATTENTION : Finance Division

SUBJECT : MEXTRA, Subproject 45, Additional
Authorization No. 8

Under the authority granted in the Memorandum dated
13 April 1953 from the DCI to the DD/A, and the extension of
this authority in subsequent memoranda, Subproject 45 was
previously approved. Under the same authority an additional
sum of \$3,760.00 has been authorized to cover the subproject's
expenses and should be charged to Allotment 9-2502-75-902.

~~XXXXXXXXXX~~
Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS:

~~XXXXXXXXXX~~
Research Director

Date: JUN 6 1956

I CERTIFY THAT FUNDS ARE AVAILABLE
OBLIGATION RESERVE NO. 3660
CHARGE TO ALLOTMENT NO. 9-2502-75-902

AUTHORIZING OFFICER

Distribution:

Orig & 2 - Addressee

- 1 - TSS/CC
- ✓ 1 - TSS/TASB
- 2 - TSS/CD

45-119

11 June 1959

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MKULTRA, Subproject 45, Invoice No. 14
Allotment 9-2502-75-902

1. Invoice No. 14 covering the above subproject is attached.
Payment should be made as follows:

(E) Cashier's check in the amount of \$35,750.00,
drawn on a [REDACTED] Bank.

(B) The check should be made payable to the [REDACTED]

2. Please forward the check to Chief, TSS/Chemical Division,
through TSS Budget Officer, no later than 22 June 1959. Other
invoices will follow.

(A)

[REDACTED]
Chief
TSS/Chemical Division

Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee
1 - TSS/FASB
2 - TSS/CD

(A) TSS/CD [REDACTED] (11 June 59)

I CERTIFY THAT FUNDS ARE AVAILABLE:
ORGANIZATION REFERENCE No. 1913
CHARGE TO ALLOTMENT No. 9-2502-75-902

AUTHORIZING OFFICER

45-119

~~SECRET~~

INVOICE

For services

\$35,750.00

~~XXXXXXXXXX~~

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 14 applying to Subproject 45 of MKULTRA, that performance is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipt is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

C/TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Original signed by
~~XXXXXXXXXX~~

Research Director

Date: 11 JUN 1959

~~XXXXXXXXXX~~

FILE 45

RECEIPT

I hereby acknowledge receipt of the following check:

Official Check, dated March 1, 1956, in the amount of \$33,000.00,
drawn on ~~_____~~, payable to the
B. ~~_____~~. The check number is
NO 228791.

~~_____~~ A

Date: 7-11 March 1956

For forwarding

44-121
23 May 1956

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA: TSS/Budget Officer

SUBJECT: MKULTRA Subproject 45, Invoice No. 5
Allotment 6-2502-10-001

(E)
(B) 1. Invoice No. 5 for MKULTRA Subproject 45 is attached. Other invoices will follow later. It is requested that payment be made by cashier's check in the amount of \$33,000.00. The check should be drawn on [redacted] bank and made payable to the [redacted]

2. Please forward the check to Chief, TSS/Chemical Division through TSS/Budget Officer by 7 June 1956.

(A) [redacted]
Acting Chief
TSS/Chemical Division

Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressed
1 - Comptroller

(E) ✓ 1 - TSS/FASB [redacted]
2 - TSS/CD [redacted]

I CERTIFY THAT FUNDS ARE AVAILABLE
OBLIGATION REFERENCE No. 4437
CHARGE TO ALLOTMENT No. 6-2502-10-001

AUTHORIZING OFFICER

MIN
CHECK # 21087N THE AMOUNT OF \$33,000.00
RECEIVED 5 JUN 1956

(A) TSS/CD: (22 May 1956)

(A) [redacted]
001

MAY 22 5 02 PM '56

23 MAY 1956

INVOICE

For services

\$33,000.00

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 5 applying to Subproject 45 of MKULTRA, that performance is satisfactory, that the services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Acting Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

45-122
21 February 1956

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MEXLTRA Subproject 45, Invoice #4
Allotment 6-2502-10-001

(E)
(B) 1. Invoice #4 for MEXLTRA Subproject 45 is attached. Other invoices will follow later. It is requested that payment be made by cashier's check in the amount of \$33,000.00. The check should be drawn on a [redacted] bank and made payable to the [redacted].

2. Please forward the check to Chief, TSS/Chemical Division through TSS/Budget Officer by 5 March 1956.

(A)
(E) Deputy Chief
TSS/Chemical Division

Attachments:
Invoice & Certifications

CHECK # 225779 IN THE AMOUNT OF \$33,000
RECEIVED 6 MAR 1956

(A)
Distribution:
- Orig & 2 - Addressee
1 - Comptroller

(A)
TSS/CD/ [redacted] 6001- 6-2502-10-001-17.9-433000.00

Cu Cash

33,000.00
INVOICE NUMBER

CERTIFIED FOR PAYMENT OR CREDIT

(A) [redacted] 1028 10000 10000
AUTHORIZED CERTIFYING OFFICER

CERTIFY THAT FUNDS ARE AVAILABLE:
CAUTION REFERENCE NO. 1439
CHECK TO [redacted] NO. 6-2502-10-001

RECEIVED

~~45-122~~

21 Feb 56

\$33,000.00

CERTIFICATIONS

(1) It is hereby certified that this is Invoice 4 applying to Subproject 45 of MURKIN, that performance is satisfactory, that the services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Date: _____

Chief, TSS/Chemical Division

(2) It is hereby certified that this invoice applies to Subproject 45 of MUMULTA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Date:

Research Director

MEMORANDUM OF AGREEMENT

- B The purpose of this memorandum is to set forth the mutual administrative responsibilities of the [REDACTED]
B [REDACTED], hereafter known as the [REDACTED] the principal investigator, and the sponsor. Therefore, it is mutually agreed that,
- B A. the principal investigator shall submit for the sponsor's inspection the [REDACTED] annual audit report, certified by a CPA.
- B B. The bank statements and cancelled checks of the special account, maintained for third party disbursements, shall be submitted for inspection upon the sponsor's request.
- B C. It is understood that any travel expenses incurred in the furtherance of the research program will be accounted to the [REDACTED] in a manner consistent with its established practices and policies.
- D. Upon the request of TSS/CD, the principal investigator shall submit to the sponsor reports of technical progress in the research covered by these funds.

C
Date: 2/1/56 [REDACTED]

Downgraded to: CONFIDENTIAL
by authority of: 187475
date: June 1981
E2 IMPDET; CL BY 187475

45-124
(A) DRAFT: [REDACTED]
30 January 1956

MEMORANDUM FOR: THE RECORD

SUBJECT: Project MKULTRA, Subproject 45

(B) 1. The scope of this project is intended to encompass all those activities now engaged in by the [REDACTED] under the direction of TSS/CD. These activities take the form of three lines of biochemical investigation, namely, the Curare-like effect of certain thiols, the preparation of hydrogenated quinolines and indole alkaloids and a program of investigation of toxic cerebral states. This last investigation will include bio-assay and chemical analysis of various body fluids of animals in which cerebral toxemias have been produced. It is the aim of this program to endeavor to understand the mechanism of such states as toxic delirium, uremic coma, and cerebral toxicity from poisoning. In order to continue the established "cover" activities of the [REDACTED] and to make available a pool of subjects for testing purposes, the [REDACTED] and [REDACTED] effects of compounds resulting from the above program will be evaluated.

(C) 2. The attached proposal from [REDACTED] indicates the extent of the investigations that his facilities will allow him to carry out on the materials developed in the three lines of research referred to in paragraph one, as well as certain other materials of interest to TSS/CD. [REDACTED] also serves as a general consultant to this Division and provides cover and cut-out facilities to the Agency.

(C) 3. The total cost of this project for a period of one year will not exceed \$100,000. Charges should be made against Allotment 6-2502-10-001.

(B) 4. [REDACTED] has been requested to submit a summary accounting or a copy of the [REDACTED] annual audit report be made available for the sponsor's inspection. Also, it has been requested that any unexpended funds shall be returned to the Agency.

(B) 5. Title to any permanent equipment purchased by funds granted [REDACTED] shall be retained by the [REDACTED] in lieu of higher overhead rates.

* other than its activities as a cut-out

Downgraded to: CONFIDENTIAL
by authority of: 187475
date: June 1981

E2 IMPDET; CL BY 187475

45-124
Downgraded to: ~~CONFIDENTIAL~~
by authority of 187475
Date: June 1977

E2, UNDET; CL BY 187475

- 2 -

- (B) 6. It was mutually agreed that documentation and accounting for
(B) travel expenses which are normally reimbursable by the [REDACTED]
(B) [REDACTED] shall conform with the accepted practices of the [REDACTED]
7. [REDACTED] agreed to comply with the requirements of
the Memorandum of Agreement.

(A) [REDACTED]

TSS/Chemical Division

APPROVED:

[Signature]
Chief, TSS/Chemical Division

APPROVED FOR OBLIGATION
OF FUNDS:

(A) [REDACTED]

Research Director

Date: 2 Feb 1976

Attachment:
Proposal

Distribution:
Original Only

Downgraded to: ~~CONFIDENTIAL~~
by authority of 187475
Date: June 1977

E2, UNDET; CL BY 187475

45-124

~~WARNING NOTICE~~
~~SENSITIVE INFORMATION~~
~~FOUO AND MEMOS EXCLUDED~~

RESEARCH PROPOSAL

(8) [REDACTED]

February 1956 - 1957

Part I

Bio-assay and Chemical Analysis of Body Fluids in Toxic Cerebral States

General Survey of the Problem

There are a variety of clinical conditions, many of them terminal, in which patients under clinical observation pass from mild disorientation into delirium and coma. These conditions of cerebral intoxication are often associated with the failure of some vital organ other than the brain. The most important forms of such cerebral intoxications are

- 1 - Uremic coma associated with renal failure
- 2 - Hepatic coma associated with liver failure
- 3 - Convulsions and coma of eclampsia associated with the pathology of the placenta and involving also the liver and kidneys
- 4 - Malignant cachexia associated with advanced carcinomatosis
- 5 - Toxic delirium associated with severe bacterial infection, at times with a generalized septicemia or bacteremia
- 6 - Delirium, coma and convulsions resulting from chemical poisoning in which the toxic substance may act directly or indirectly on cerebral tissue.

1 - Uremia. A review of the current texts and contributions to medical journals reveals a remarkable lack of information concerning these forms of cerebral intoxication. Thus, in uremia there is a wide difference of opinion in regard to the identity of the urinary constituents retained in the blood which are responsible for the effects on the central nervous system. Fishberg states that after a hundred years of search for the "uremic principle" its identity still remains a mystery. Homer Smith, in his work on the kidney, stresses the importance of potassium retention. Others have implicated the magnesium ion. Most authors

on the subject believe that the cerebral effects of uremia are the result of retention of phenolic compounds. A smaller number believe that retained nitrogenous substances such as indican and unidentified products of intermediary protein metabolism are the responsible agents. The only sphere of agreement is the well-established fact that injection of normal urine into laboratory animals in adequate doses will produce coma and death, whereas the urine from patients in uremia is relatively non-toxic, the toxic substances remaining in the bloodstream of the affected individuals. It is interesting to note in the transactions of the Macey Foundation on Renal Function from 1949 to 1953 that a conference has not been devoted to the subject of uremia.

2 - Hepatic Coma. The cerebral effects of hepatic failure consisting of high fever and progressively deepening coma have been stressed by Heyd, and are often known as the Heyd syndrome. The cause of the coma is generally attributed to the retention of ammonia or ammonium carbonate. However, with the introduction of the artificial kidney the removal of ammonia by dialysis, which is readily accomplished, has been shown to have no influence on the comatose condition of the patient. Some investigators have postulated the retention of bile acids as the cause of the coma. There is even less information available on hepatic coma than on uremia.

3 - Eclampsia. Eclampsia remains "a disease of theory". The convulsions and coma that occur in these patients are of unexplained origin. The consensus of opinion to date is that the effects are brought about by spasm of the smaller blood vessels but the cause of the vascular spasm remains undetermined.

4 - Cachexia. The disorientation and coma of patients with cachexia resulting from malignant disease have provoked remarkably little attention in recent years. Willis believes that the cachectic state is an expression of malnutrition with the retention of acetone bodies and is therefore related to diabetic coma. However, there are no adequate studies to substantiate this theory and the treatment of such patients with intravenous glucose and injections of insulin has not been carried out to my knowledge.

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 01-11-2001 BY 60322
EXEMPTED FROM GDS REVIEW

5 - Toxic Delirium. Before the days of penicillin and the antibiotics, disorientation and delirium were frequent complications of severe infection. It was common in pneumonia and treated by forcing fluids either intravenously or by mouth. However, the toxic effects on the central nervous system of common infectious organisms received no detailed study. In general, the cause of the delirium was related to the severity of the infection.

In summarizing the known facts about uremia, hepatic coma, eclampsia and toxic delirium we can say that the specific cause of the cerebral depression remains unknown in all of them. The only common pathologic effect is the lowering of the cerebral uptake of oxygen. This, however, apparently is a consequence of the suppression of cerebral function rather than a causative factor.

6 - Cerebral Toxicity Associated with Poisoning. The terminal stage of most forms of poisoning is usually described as "Convulsions, coma and death". The localization of the underlying cerebral effects, however, has not been ascertained for the systemic poisons. In an attempt to arrive at a compendium of present day information we have summarized the pathology of various forms of poisoning in the tabulations submitted with this proposal.

Plan of Procedure

Analysis of Body Fluids. We propose to establish a laboratory for the chemical analysis of body fluids in the toxic cerebral states. When patients with toxic cerebral manifestations are under observation in the hospital for uremia, hepatic coma, eclampsia, malignant cachexia, etc., blood serum, cerebrospinal fluid, intraperitoneal fluid and pleural fluid will be obtained and fractionated for possible toxic components such as phenol, bile acids, toxic amines and other components that may be found of interest as the project develops. This analytical laboratory will employ two biochemists. One will be associated with the routine service laboratories at the (B) [redacted] and will supervise the collection and

preservation of these materials and will provide the routine analysis of their constituents which can be determined by known chemical technics such as determination of potassium, sodium and other inorganic constituents, their organic constituents such as bile acids, urea, non-protein nitrogen, CO_2 combining power, etc. The other biochemist will be engaged in specialized chemical analysis, such as electrophoresis, spectrographic analysis, etc. and will try to devise new methods for the determination of toxic amines, phenols, etc.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Bio-Assay of Body Fluids. Another laboratory will be maintained in the animal house for bio-assay on laboratory animals of the toxic constituents isolated in the chemical laboratory.

Animal Experimentation. While the chief interest in the toxic cerebral state centers in patients, it is planned nevertheless, to produce these conditions in laboratory animals and to carry out parallel studies on their body fluids. Both uremia and hepatic coma are readily produced in laboratory animals, such as dogs, rabbits, guinea pigs and rats by the surgical removal of the kidneys or liver, or through selective poisoning of these organs. A highly specific form of chemical damage to the liver can be achieved by injecting carbon tetrachloride into the portal vein and a highly selective form of renal damage can be produced by injecting HgCl_2 into the renal arteries. Laboratory animals also offer the best available means for the analysis of the cerebral effects of neurotoxic chemical compounds.

45-107
5.
WARNING NOTICE

SENSITIVE INTELLIGENCE
SUBJECTS AND METHODS INVOLVED

Part II

Program for the Chemical Synthesis of Neurotoxic Compounds.

It is planned to continue the synthesis of neurotoxic compounds in accordance with the previous leads and accomplishments disclosed by the work carried out during 1954 and 1955. Four separate laboratories are engaged in this work. [REDACTED] in cooperation with [REDACTED] is continuing the synthesis of sulfur-containing organic compounds. These thiol compounds beside their curare-like effects also are effective agents in influencing the autonomic nervous system. During the year 1955 the [REDACTED] at [REDACTED] under the direction of [REDACTED] has cooperated in the pharmacological testing of these compounds. The [REDACTED] has found that the isothiuroniums exhibit inhibitory effects on both the sympathetic and parasympathetic ganglia and also potentiate epinephrine.

[REDACTED] is continuing his work on the diphenolic and monophenolic compounds at the [REDACTED]. In recent years the nitrogen group has been introduced by the Mannich reaction on the phenolic ring so that there is one carbon between the nitrogen and the ring structure. In 1956 it is proposed to introduce the nitrogen directly on the ring by nitration. Some of [REDACTED] phenolic compounds produce definite auditory hallucinations and disturbance of taste and oral sensations. These effects are transitory and their duration is dependent on the dose of the drug. These compounds are of great clinical interest because of the scarcity of drugs in this field. The most potent compound in this group are derivatives of 4-chloro-3, 5 dimethyl phenol.

[REDACTED] of the [REDACTED] has prepared numerous nitrogen derivatives of the hydrogenated quinolines. He also has succeeded in making similar derivatives of hydrogenated indol. These compounds prepared by [REDACTED] are unique in that they produce pronounced curare action in animals, both by injection.

and oral administration without the presence of the methonium group. These compounds (in suitable doses) have been used in a series of over 50 patients by both intramuscular and oral routes. At the low dosage level used they showed specific muscular relaxing effects on selective organs; some of them relax voluntary muscle while others show specific relaxing effect on the musculature of either the urinary tract or the gastrointestinal tract. The voluntary muscle relaxants have been used on patients with paralysis agitans and rheumatoid arthritis. Those which relax the smooth muscle of visceral organs have been used on patients with disturbed bladder function, with multiple sclerosis and prostatic hypertrophy.

(B)

[REDACTED]

has continued to cooperate under a written agreement (previously arrived at) in synthesizing

C starting materials for [REDACTED]. They have supplied hydrogenated

C quinolines for [REDACTED] and nitrated some of the diphenolic compounds in cooperation with

C [REDACTED] It is proposed to continue this cooperation.

PROPOSED BUDGET

1956 - 1957

Analysis of Body Fluids in Toxic States

Biochemists (2)	\$16,000.00	
Technicians, Laboratory (2)	6,000.00	
Special Equipment	10,000.00	
Supplies	8,000.00	
Clinical Assistant	<u>6,000.00</u>	\$46,000.00

Chemical Synthesis

C [REDACTED] Consultant	2,000.00	
C, B [REDACTED]	4,500.00	
C, B [REDACTED]	12,500.00	
C Chemical Supplies [REDACTED]	<u>6,000.00</u>	\$25,000.00

Toxicology and Pharmacology Laboratory

Animal caretaker and animals	12,000.00	
Pharmacologist and technician	12,000.00	
C [REDACTED] Toxicology	<u>5,000.00</u>	<u>\$29,000.00</u>
TOTAL		\$100,000.00

WARNING NOTICE
SENSITIVE INTELLIGENCE
SOURCES AND METHODS INVOLVED

45-125
31 January 1956

MEMORANDUM FOR: CONTROLLER

ATTENTION: Finance Division

SUBJECT: MEXLEA, Subproject 45, Additional
Authorization No. 4

Under the authority granted in the memorandum dated 13 April 1953, from the DGI to the DD/A and the extension of this authority in subsequent memoranda, Subproject 45 was previously approved.

Under the same authority an additional sum of \$100,000.00 has been authorized to cover the subproject's expenses (thereby bringing to a total of \$133,000.00 funds obligated during FY 56), to be charged to Allotment 6-2502-10-001.

SIDNEY GOTTlieb

Chief

TSS/Chemical Division

APPROVED FOR
OBLIGATION OF FUNDS:

Research Director

Date:

Distribution:

Orig & 2 - Addressee

- 1 - TSS/OC
- 1 - TSS/FASB
- 1 - TSS/SEB
- ✓ 2 - TSS/CD

(A) TSS/CD: [initials] (31 January 1956)

Mo R 1433

RECEIPT

I hereby acknowledge receipt of the following checks:

(3)

Official Check #0209528 dated 22 Sept 55,
in the amount of \$33,667.00,

(3)

Cashier's Check #001122 dated 22 Sept 55,
in the amount of \$10,810.67,

(3)

Cashier's Check #001123, dated 22 Sept 55,
in the amount of \$432.13,

(3)

all three payable to the [REDACTED]

[REDACTED]

(2)

Date: September 23, 1955

544

45-127
16 September 1955

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MULLISA Subproject A5, Invoice #3
Allotment 5-2502-10-001 & 6-2502-10-001

1. Invoice #3 is attached covering the above subproject. This is a final invoice. It is requested that payment be made as follows:

(E)
(B) Cashier's check in the amount of \$33,667.00 drawn on a [redacted] and payable to the [redacted].

2. The check should be forwarded to Chief, TSS/Chemical Division, through TSS/Budget Officer, no later than 30 September 1955.

3. The three invoices covering this subproject aggregate \$100,000.00, and make use of the balance of the FY 55 funds plus the FY 56 funds obligated to date under this subproject. Since it is expected that additional FY 56 funds will be obligated under this subproject, the files on this project should not be closed.

SIMNEY GOTTLEBER
Chief
TSS/Chemical Division

Attachments:
Invoice & Certifications

Distribution:
Orig & 2 - Addressee
1 - Comptroller
1 - TSS/FASB
2 - TSS/CD [redacted]

I CERTIFY THAT FUNDS ARE AVAILABLE:

OBLIGATION REPORT NO. 323 4
5-2502-10-001 667.00
CHARGE TO ALLOTMENT NO. 6-2502-10-01 3210.00

(A)
TSS/CD (13 September 1955)

CHECK# 41104528 AUTHORIZING OFFICER
RECEIVES. 27 1955 THE AMOUNT OF \$33,667

(A) [redacted]

45-127

INVOICE

For services

\$23,667.00

(R)

CERTIFICATIONS

(1) It is hereby certified that this is Invoice #3 applying to Subproject 45 of MEULTRA, that performance is satisfactory, that the services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 45 under MEULTRA which was duly approved and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

~~SECRET~~

45-128
6 August 1955

MEMORANDUM FOR: CONTROLLER

ATTENTION : Finance Division

SUBJECT : MCHMERA, Subproject 45, Additional
Authorization No. 3

Under the authority granted in the memorandum dated 13 April 1953, from the DCI to the DC/A and the extension of this authority in subsequent memoranda, Subproject 45 was previously approved. Under the same authority an additional sum of \$33,000.00 has been authorized to cover the subproject's expenses (thereby bringing to a total of \$33,000.00 funds obligated during FY 56), to be charged to Allotment 6-2502-JD-001.

APPROVED FOR
OBLIGATION OF FUNDS:

SIDNEY GOTTILIER
Chief
TSS/Chemical Division

Research Director

Date:

Distribution:

Orig & 2 - Addressee
1 - TSS/OC
1 - TSS/FASB
1 - TSS/SRB
✓ 2 - TSS/CD

(A) ~~XXXXXXXXXX~~

~~XXXXXXXXXX~~

MOR 223

45-129

SUB. 7-45

RECEIPT

I hereby acknowledge receipt of the following:

Cashier's Check No. UMI3623 in the amount of \$33,000.00, dated July 8, 1955, drawn on the [REDACTED]

(E)

(B)

(B)(C)

Date: 7-19-55

45-130

RECEIPT

I hereby acknowledge receipt of the following:

Cashier's Check No. UN13623 in the amount of \$33,000.00, dated July 8, 1955
drawn on the [REDACTED] payable to

(E)
(B)

[REDACTED]

(C)

Date: July 13, 1955

151-54

MEMORANDUM RECEIPT

12 JUL 1955

DATE _____

TO:

FROM:

SUBJECT:

It hereby acknowledge receipt of the following:

(3) [REDACTED] check \$ 11,302.33

(4) [REDACTED] payable to [REDACTED] in the amount \$3,000.00.
Invoice #2: 4/10/55

please return _____ signed copy(ies) of this receipt

THE UNIVERSITY OF CHICAGO

Mar 21

DATE RECEIVED

To
FORM NO. 35-60
JUN 1960

~~SECRET~~
~~CONFIDENTIAL~~

28 June 1955

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : Project NEULIRA, Subproject 45
Invoice 2, Allotment 5-2502-10-001

1. Invoice 2 for Subproject 45 of Project NEULIRA is attached. Other invoices will follow later. It is requested that payment be made by cashier's check in the amount of \$33,000.00. The check should be drawn on [REDACTED] bank and made payable to the [REDACTED].

2. Please send the check to Chief, TSS/Chemical Division through TSS/Budget Officer by 11 July 1955.

STUART GOTTIER

Chief

TSS/Chemical Division

Attachments:

Invoice & Certifications

Distribution:

Orig & 2 - Addressee

1 - Comptroller

1 - TSS/FASB

2 - TSS/CD

(A)

INVOICE 2

28 June 1955

For services

\$33,000.00

CERTIFICATIONS

(1) It is hereby certified that this is Invoice 2 applying to Subproject 45 of Project MEULTRA, that performance is satisfactory, that the services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Date:

SIDNEY GOTTLIEB
Chief, TSS/CD

(2) It is hereby certified that this invoice applies to Subproject 45 under Project MEULTRA which was duly approved and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Date:

(A) Research Director

~~CONFIDENTIAL~~

23 May 1955

MEMORANDUM FOR: THE CONTROLLER
ATTENTION: Finance Division
SUBJECT: Project NEUTRA, Subproject 45

Under the authority granted in the memorandum dated 13 April 1955 from the DCI to the EO/A, and the extension of this authority in subsequent memoranda, an additional \$27,000 of the over-all Project NEUTRA funds have been obligated to cover the subproject's expenses.

HENRY GOSTLICK
Chief, TSS/Chemical Division

APPROVED FOR OBLIGATION
OF FUNDS:

Research Director

Date: _____

- Distribution:
- Orig. & 2 - Addressee
 - 1 - TSS/OC
 - 1 - TSS/FASB
 - 1 - TSS/SRB
 - 2 - TSS/CD

(A)



Mo R-201

~~CONFIDENTIAL~~

45

D.R.G.

CERTIFICATE

I hereby certify receipt of Cashier's Check No. MN191739, in the
amount of \$33,333.00, drawn on the 
payable to the 

(2)

Date: April 14th 1955

MEMORANDUM RECEIPT

APR 13 1955
DATE

TO:

FROM:

SUBJECT:

Sumner
Supt. of

I hereby acknowledge receipt of the following:

(3)

CHECK # 44247 IN THE AMOUNT OF \$53.33
RECEIVED.

Please return signed copy (list) of this receipt

To
Form No. 10-55
Rev. 1-55

(A)

INVOICE NO. 1

31 March 1955

For services.....\$23,333.00

(6)

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 1 applying to Subproject 45 of Project MEULTRA, that performance was satisfactory, that the services were accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts are on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Date: _____

SIDNEY GOTTLIEB
Chief, TSS/CD

(2) It is hereby certified that this invoice applies to Subproject 45 under Project MEULTRA which was duly approved and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DGI to the DD/A, and the extension of this authority in subsequent memoranda.

Date: _____

(A) _____
Research Director

4-136
1 April 1955

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : Project NEULIRA, Subproject No. 45
Invoice #1, Allotment 5-2502-10-001

Invoice No. 1 for Subproject 45 of Project NEULIRA is attached. Other invoices will follow later. It is requested that payment be made by cashiers check in the amount of \$33,333.00, payable to the [REDACTED] B

B [REDACTED] The check should be sent to Chief, TSS/CD through TSS/Budget Officer by Wednesday, 6 April 1955.

SIDNEY GOTTLIEB
Chief
TSS/Chemical Division

Attachments:
Invoice & Certifications (E) [REDACTED]

Distribution:
Orig & 2 - Addressee
1 - Comptroller
1 - TSS/FASB
2 - TSS/CD (A) [REDACTED]

CHECK # 9139 IN THE AMOUNT OF \$33,337
RECEIVED APR 13 1955

(A) [REDACTED]
BY THAT FUNDS ARE AVAILABLE

RECEIVED [REDACTED]

ALLOTMENT NO.

4 APR 1955

AUTHORIZING OFFICER [REDACTED]

21 March 1953

MEMORANDUM FOR: COMPTROLLER

ATTENTION : Finance Division

SUBJECT : Project KUHLEA, Subproject 45

Under the authority granted in the Memorandum dated 13 April 1953 from the DOI to the DD/A, and the extension of this authority in subsequent memoranda, Subproject 45 has been approved, and \$40,000.00 of the over-all Project KUHLEA funds have been obligated to cover the subproject's expenses and should be charged to Allotment 5-2502-10-001.

SIGNEY GOTTIER
Chief
TSS, Chemical Division

APPROVED FOR OBLIGATION
OF FUNDS:

Research Director

Date: _____

Distribution:

Orig & 2 - Addressee

- 1 - TSS/OC
- 1 - TSS/FASB
- 1 - TSS/SRB
- ✓ 2 - TSS/CD

MOR-180

(A)

UNCLASSIFIED

CONFIDENTIAL

SECRET

(SENDER WILL CIRCLE CLASSIFICATION TOP AND BOTTOM)

(RECEIVER WILL CIRCLE CLASSIFICATION TOP AND BOTTOM)

CENTRAL INTELLIGENCE AGENCY
OFFICIAL ROUTING SLIP

TO	INITIALS	DATE
1 TSS/DC		11 Aug.
2 TSS/CD		
3		
4		
5		
FROM	INITIALS	DATE
1 TSS/CD		7/28
2		
3		

☐ APPROVAL☐ INFORMATION☐ SIGNATURE☐ ACTION☐ DIRECT REPLY☐ RETURN☐ COMMENT☐ PREPARATION OF REPLY☐ DISPATCH☐ CONCURRENCE☐ RECOMMENDATION☐ FILE

Remarks:

SECRET

CONFIDENTIAL

UNCLASSIFIED

FORM NO. 30-4
1 NOV 53

Previous editions may be used.

U. S. GOVERNMENT PRINTING OFFICE

16-55548-2

(40)

45-138
DRAFT
21 March 1955

MEMORANDUM FOR: THE RECORD

SUBJECT : Project-MKULTRA, Subproject 45

(B) 1. The scope of this project is intended to encompass all those activities now engaged in by the [REDACTED] (B) in its own facilities under the direction of TSS, Chemical Division. These activities will take the form of three lines of biochemical investigation; namely, the curare-like effect of certain thiols, the preparation of hydrogenated quinolines and indole alkaloids, and the continued study of diphenolic compounds. In addition to the above investigations, the present biological testing and assaying techniques will be elaborated and broadened to include cardiovascular and anticarcinogenic effects of compounds resulting from the above programs.

2. The attached proposal from [REDACTED] (C) indicates the extent of the investigations that his facilities will allow him to carry out on the materials developed in the three lines of research referred to in paragraph 1, as well as certain other materials of interest to TSS/CD. [REDACTED] (C) also serves as a general consultant to this Division and provides cover and cut-out facilities to the Agency.

3. The total cost of this project for a period of one year will not exceed \$100,000.00. At the present time, the sum of \$40,000.00 is being committed, the balance of the total to be committed at a later date.

(C) 4. [REDACTED] has been granted a TOP SECRET clearance by the Agency, and is fully capable of protecting the security of the Government's interest in this matter.

APPROVED FOR OBLIGATION
OF FUNDS:

[REDACTED] (A)
TSS, Chemical Division

APPROVED:

for Research Director

[REDACTED] (A)
Chief, TSS/Chemical Division

Date:

24 Mar 55

APPROVED FOR ADDITIONAL APPROPRIATION
OF \$27,000: [REDACTED] (A)

Attachments:
Proposal



[REDACTED]
Research Director

Original Only.

Date:



21 Mar 1955

  -2-
APPROVED FOR ADDITIONAL APPROPRIATION OF \$33,000.00:


Research Director 

Date:

AUG 10 1955

RESEARCH PROPOSAL [REDACTED] (B)

1955 - 1956

Three lines of biochemical investigation are proposed for 1955.

These are being pursued with [REDACTED] (C) as senior consultant, and the compounds are being prepared, as in 1954, by [REDACTED] (B) (C)

[REDACTED] (B) (C) at the [REDACTED] (B) and [REDACTED] (C) the [REDACTED] (B) (C). The chief interest in [REDACTED] (C) work for 1955 will

be in the thiol compounds, some of which have carboxy groups, as well as amine groups, and some of which have either curare or soporic action.

[REDACTED] (C) will continue his work on the diphenolic compounds.

In this work the nitrogen for the first time will be placed directly on the ring. A wide variety of biological effects is found in these compounds. The work of [REDACTED] (C)

[REDACTED] (C) will center about the hydrogenated quinolines and the indole alkaloids.

Not only will the propanol linkage be used in the synthesis of these new compounds, but also the methyl propanol linkage and a linkage in which the carboxy group substitutes for the hydroxyl in the propanol.

Biological testing of these compounds will be more elaborate than previously and the assay technics will be broadened to include work on the tracheal rings of the guinea pig, hyperthermia in rabbits, blood pressure and cardiovascular effects and anticarcinogenic effects.

[REDACTED]

PROPOSED BUDGET FOR CHEMICAL SYNTHESIS

1955 - 1956

15-13

(C) [REDACTED]	Consultant chemist (fees and travel)	\$ 3,000.00
(C) [REDACTED]	(Budget partially supplied through the [REDACTED] as grant)	(B) 12,000.00
(C) [REDACTED]	(Budget partially supplied through the [REDACTED])	(B) 15,000.00
	Biochemist	10,000.00
	Synthetic starting materials [REDACTED]	(B) 12,500.00
	Laboratory Supplies	<u>7,500.00</u>
	Subtotal	60,000.00
	Biological and Pharmacological Testing	
	Clinical part-time assistants	8,000.00
	Pharmacological, technical	8,000.00
	Research Pharmacologist	8,000.00
	Animals and animal maintenance	3,000.00
	Tissue examinations	3,000.00
	Contribution to maintenance of [REDACTED]	(B) 10,000.00
	Total	\$ <u>100,000.00</u>

[REDACTED]

INVOICE CHECK LIST

NR0000 Subproject 45

As Take of Original Authorization	Period Covered	Time Extended To	Allowment Number	Amount of Obligation
24 March 1955	1 year		5-2502-10-001	\$40,000.00

Additional Authorizations	Period Covered	Time Extended To	Allowment Number	Amount of Obligation
#8 6 June 1959			9-2502-15-908	3,760.00
#9 29 Dec. 1959			925-111-101	71,500.00
# 45 31 Mar 61	1 Jan 61 - 31 Mar 61		1115-111-101	20,000.00
# 11	5 Oct 61		2125-1311-312	20,000.00
# 12	8 Feb 62		2125-1311-312	40,000.00

Invoice Number	Date	Amount	Balance
#13	5 Feb 59	\$35,750.00	\$35,750.00
Add. Auth. #8	5 Jun 59	3,760.00	39,510.00
#14	11 Jun 59	35,750.00	3,760.00
#15	21 Aug 59	3,760.00	—
Add Auth. #9	29 Dec 59	71,500.00	71,500.00
#16	7 Jan 1960	23,833.00	47,667.00
#17	13 Feb 1960	23,833.00	23,834.00
#18	11 Aug 60	23,834.00	—
#19	31 Mar 61	20,000.00	20,000.00
#20	5 Oct 61	20,000.00	40,000.00
21		40,000.00	—

INVOICE CREDIT SUMMARY

KAMICHA Subproject 45

Date of Original Authorization	Period Covered	Time Ex-posed to	Allotment Number	Amount of Obligation
24 MAR 55	1 year		5-2502-10-001	40000.00

Additional Authorizations	Period Covered	Time Ex-posed to	Allotment Number	Amount of Obligation
25 May 55			5-2502-10-001	27000.00
8 Aug 55			6-2502-10-001	33000.00
30 Jan 56	1 year		6-2502-10-001	100000.00
10 Jan 57	1 year		7-2502-10-001	100000.00
21 Jan 58	1 year		8-2502-10-001	65200.00
27 Jan 59	1 year		9-2502-75-962	71500.00

Invoice No.	Date	Amount	Balance
1	1/1/55	33,333.00	6,667.00
2	6/1/55	33000.00	667.00
3	9/1/55	33667.00	-
4	2/1/56	33000.00	67000.00
5	5/1/56	33000.00	34000.00
6	10/1/56	34000.00	-
7	2/1/57	33,333.33	6,666.66
8	3/1/57	33,333.33	34,333.33
9	12/1/57	33,333.33	
10	28 Jan 58	21,733.33	43,466.67
11	23 Jan 58	21,733.33	21,733.34
12	22 Apr 58	21,733.34	-

110
17933.33
66666.66
1/3 21933.33
65200.00
5
3
24
110

REMARKS: